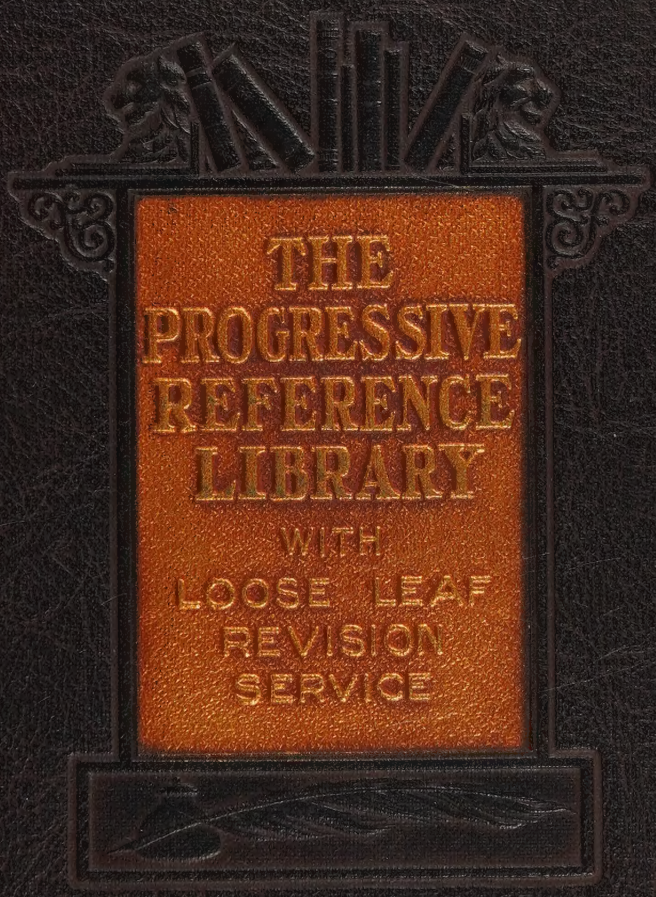
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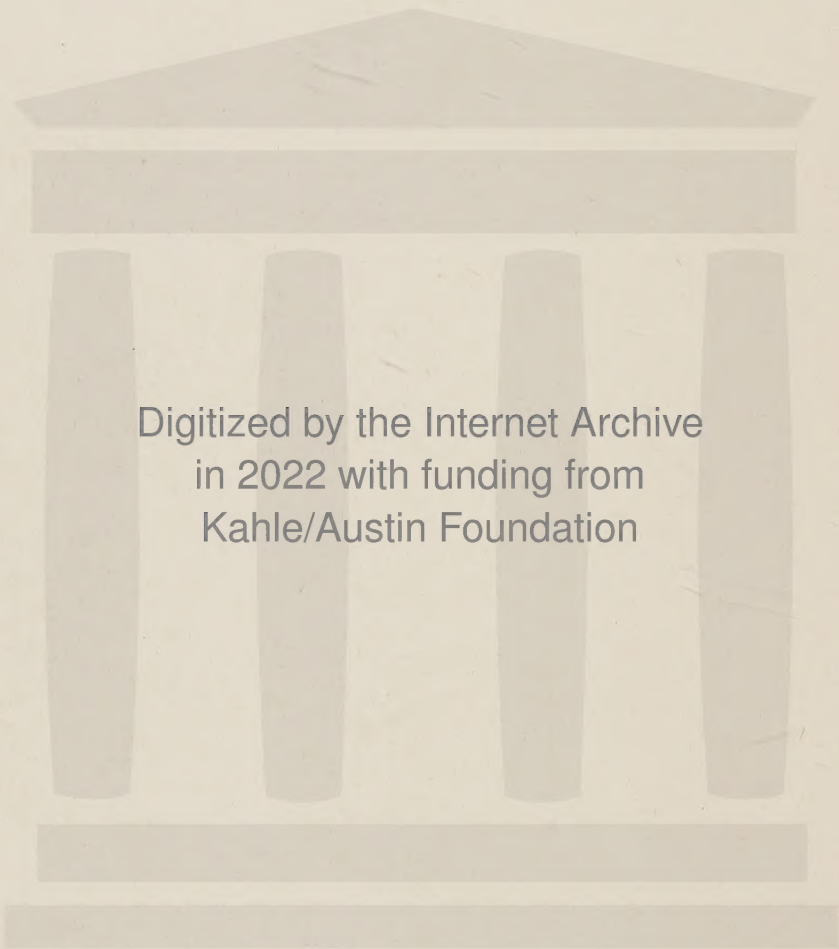
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Practical Home and School Methods

of

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VOLUME X

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The Sistine Madonna.

The name of this beautiful
picture is the Sistine Madonna
It represents the Madonna holding
a little child in her arms. This
Child is the infant Christ.
The Madonna wears a loose
gown and has a loose drapery
which falls over her shoulder.
She is holding the Child very tenderly.

The Child rests His head lovingly against His mother's shoulder. He has dark eyes and hair.

In the center of the picture, the Madonna is standing on a mass of clouds. On either side, a little below the Mother and Child, are the figures of a man and a woman representing St. Sixtus and St. Barbara.

At the lower edge of the picture are two little dimpled cherubs. They are looking upward at the baby Christ.

Look carefully into the faces of the Mother and the Child. They are very beautiful.

This picture was painted by Raphael, an Italian artist. It is now in the Dresden Gallery, Germany, where many go to see it.

2. Place.
   a. Word—Ex., Stand here.
   b. Phrase—Ex., Peanuts grow under the ground.
   c. Clause—Ex., I shall go where the climate is milder.
3. Cause.
   a. Word—Ex., Why did you come?
   b. Phrase—Ex., It wore out because of rust.
   c. Clause—Ex., We returned because a storm arose.
4. Reason.
   a. Clause—Ex., It has rained, because the walks are wet.
5. Manner.
   a. Word—Ex., It runs smoothly.
   b. Phrase—Ex., The clerks came with alacrity.
   c. Clause—Ex., We do not plow as our ancestors did.
6. Degree.
   a. Word—Ex., He reads much.
   b. Clause—Ex., We go as often as we can.
7. Purpose.
   a. Phrase—Ex., He hurried for help.
   b. Clause—Ex., He saves that he might go to college.
8. Result.
   a. Clause—Ex., The sky was so cloudy that we could not see the comet.
9. Condition.
   a. Phrase—Ex., In that case, we shall go.
   b. Clause—Ex., If you will go, I will.
10. Concession.
   a. Clause—Ex., Though I was tired, I went.
11. Assertion.
   a. Word—Ex., Perhaps we shall go.
   b. Phrase—Ex., In all probability, it is true.
12. Complementary.
   a. Phrase (Infinitive), They began to be interested.
   b. Noun (Adverbial objective).
      x. Idea expressed.
         1. Place to which—Ex., He walked home.
         2. Extent.
            a. Of time—Ex., It lasted three hours.
            b. Of space—Ex., We walked ten miles.
            c. Of measure—Ex., It weighed a pound.

3, Complements.
   a. Object complement.
      x. Word.
         1. Noun or pronoun—Ex., We picked the berries.
      y. Phrase—Ex., The inventor expected to make his fortune.
      z. Clause—Ex., The editor claimed that the story was true.
   b. Attribute complement (subjective complement).
      x. Word.
         1. Noun, pronoun, or adjective—Ex., You will be secretary.
      y. Phrase—Ex., To see is to believe.
      z. Clause—Ex., Our conviction is that the jury will disagree.
   c. Objective complement (Predicate objective or objective attribute).
      x. Word.
         1. Noun, pronoun, or adjective—Ex., The flood made the river impassable.
      y. Phrase—Ex., He danced himself out of breath.

D. Modifiers of modifiers.
  1. Adjective.
    a. Of noun—Ex., Interesting book.
    b. Of pronoun—Ex., Eager for the work, he entered the room.
    c. Of word or expression used as noun—Ex., Incessant murmuring.
  2. Adverbial.
    a. Of adjectives—Ex., Very strong.
    b. Of verbs—Ex., He swam rapidly.
    c. Of adverbs—Ex., Somewhat slowly.

E. Independent expressions.
  1. Vocatives (Nominative independent)—Ex., Hold my horse, boy.
  2. Expletive—Ex., There is a flaw in the work.
  3. Parenthetical expressions.
    a. Phrase.
      x. Prepositional—Ex., Between you and me, I don't believe it.
      y. Infinite—Ex., To be frank, I don't like it.
      z. Participial—Ex., Putting it briefly, he had no friends.
    b. Clause—Ex., The winter will be a hard one (At least, we think so).
  4. Nominative Absolute—Ex., The parents having died, the children were left without support.
  5. Exclamations.
    a. Interjections—Ex., Hurrah!
    b. Other words or phrases—Ex., Happiness beyond compare!

Parts of Speech.

I. Nouns.

A. Classes.
  1. Proper—Ex., Richmond.
  2. Common.
    a. Abstract—Ex., Virtue.
    b. Concrete—Ex., House.
  3. Collective—Ex., Infantry.
  4. Verbal (Gerund)—Ex., Walking.

B. Modifications.
  1. Gender.
    a. Masculine; b. Feminine; c. Neuter.
  2. Number.
    a. Singular; b. Plural.
  3. Case.
    a. Nominative.
    b. Possessive (Genitive).
    c. Objective.

C. Uses.
  1. Nominative.
    a. Subject—Ex., The army was large.
    b. Attribute complement (Subjective complement)—Ex., This is a city.
    c. Apposition of a nominative noun—Ex., Mr. Green, the bookkeeper, is ill.
    d. Independent.
      x. Vocative—Ex., What is the matter, Henry?
      y. Nominative absolute—Ex., The bell ringing, we started.
      z. Exclamation—Ex., Heavens!
  2. Possessive.
    a. Modifier of noun—Ex., The boy's book is here.

3. Objective.
   a. Object of verb—Ex., I saw the animals.
   b. Objective complement (Predicate objective, objective attribute)—Ex., The club made Tom their president.
   c. Object of preposition—Ex., It is on the table.
   d. Indirect object—Ex., Tell me the story.
   e. Appositive of noun in objective case—Ex., Mr. Brown sold Dan, his old horse.
   f. Subject of infinitive (Objective subject)—Ex., We believe the boy to be frank.
   g. Attribute complement of an infinitive when subject is objective—Ex., We believe him to be an honest boy.
   h. Adverbial objective—Ex., The darkness lasted five hours.

II. PRONOUNS.
A. Classes.
   1. Personal.
      a. Simple.
      b. Compound.
         y. Intensive.
         z. Reflective.
   2. Demonstrative.
   3. Interrogative.
   4. Relative.
      a. Simple.
      b. Compound.
   5. Indefinite.
      a. Distributives.
      b. Comparatives.
      c. Pronouns of number or quantity.
      d. Compound indefinites.

B. Modifications.
   1. Gender.
   2. Number.
   3. Case.
   4. Person.
      a. First.
      b. Second.
      c. Third.

C. Uses.
   1. Nominative.
      a. Subject—Ex., I believe the story.
      b. Attribute complement—Ex., It is I.
   2. Possessive.
      a. Modifier of noun—Ex., His farm is large.
   3. Objective.
      a. Object of verb—Ex., The court acquitted him.
      b. Object of preposition—Ex., I walked with her.
      c. Indirect object—Ex., Tell them the story.
      d. Subject of infinitive—Ex., Do you know him to be the culprit?
      e. Attribute complement—Ex., I know it to have been him.

III. ADJECTIVES.
A. Classes.
   1. Descriptive.
   2. Limiting.
      a. Numerals.
         y. Cardinal.
         z. Ordinal.
      b. Articles.
      c. Pronominal.
         x. Demonstrative
         y. Interrogative.
         z. Indefinite.

B. Modifications.
   1. Comparison.
      a. Degrees.
         x. Positive.
         y. Comparative.
         z. Superlative.

C. Uses.
1. Attributive—Ex., A glorious sunset followed.
2. Predicate.
a. Attributive complement—Ex., The roads are hard.
b. Objective complement—Ex., The workmen made the bridge safe.
3. Substantive—Ex., Do not listen to the counsel of the wicked.

IV. VERB.

A. Classes.
1. According to form.
a. Transitive.
b. Intransitive.
2. According to structure.
a. Strong.
b. Weak.
y. Regular.
z. Irregular.
c. Mixed.

B. Principal parts.
1. Present.
2. Past (Preterite).
3. Past participle.

C. Modifications.
1. Voice.
a. Active; b. Passive.
2. Mood.
a. Indicative.
x. Tenses.
1. Names.
a. Present.
b. Past (Preterite).
c. Future.
d. Future.
e. Present perfect.
f. Future perfect.
2. Kinds.
a. Simple—Ex., You see.
b. Progressive—Ex., You are seeing.
c. Emphatic—Ex., You do see.
d. Interrogative—Ex., Do you see?
e. Negative—Ex., You do not see.
3. Form.
a. Word—Ex., Hear.
b. Phrase—Ex., Will hear.
y. Person.
1. First; 2. Second; 3. Third.
z. Number.
1. Singular.
2. Plural.
b. Subjunctive.
w. Tense.
1. Of those subjunctive inflected regularly.
a. Present.
b. Past.
c. Present perfect.
d. Past perfect.
2. Of those formed by use of special auxiliaries. Irregular and indefinite.

3. Time signification of tenses.
a. Varying according to ideas expressed.
x. Person. } As in indicative.
y. Number. }
z. Ideas expressed.
1. Independent forms.
a. Wish—Ex., Would I were there.
b. Potential—Ex., I might go.
c. Conclusion of conditional—Ex., I would if I could.
d. Exhortation—Ex., Let him be punished.
2. Dependent forms.
a. Purpose—Ex., I went that I might see him.
b. Condition—Ex., If I were there, etc.
c. Imperative.
x. Tense.
1. Present.
y. Person.
1. Second.
z. Number.
1. Singular.
2. Plural.
d. Infinitive.
y. Tense.
1. Present.
2. Past.
z. Forms.
1. Simple root infinitive—Ex., To move.
2. Progressive—To be moving.
3. Gerund—Ex., Moving (As a noun). Otherwise classed below.
3. Verbal forms.
a. Participle.
y. Tense.
1. Present.
2. Present perfect.
3. Past.
z. Forms.
1. Mood—In ing—Ex., Waving.
2. Phrasal—Ex., Having waved.
b. Gerunds—Ex., Swimming is a healthful exercise.
D. Uses.
1. Notional verbs.
a. Finite form.
y. Transitive.
1. Active.
a. With object—Ex., They captured a bear.
b. With objective complement—Ex., They made John captain.
2. Passive.
a. Without attribute—Ex., The wolf was killed.
b. With attribute—Ex., The crown prince was made king.
z. Intransitive.
1. Complete in itself—Ex., The horses ran.
2. Copula with attribute complement.
a. Form of "to be"—Ex., The river was a torrent.
b. Other copulative verbs—Ex., The task seemed hard.

b. Infinitive.
w. Noun.
1. Subject of verb—Ex., To listen well is an art.
2. Attribute complement—Ex., To see is to believe.
3. Object complement—Ex., I wished to stay.
4. Objective complement—Ex., He made himself seem ridiculous.
5. Object of a few prepositions—Ex., None knew her but to love her.
6. Appositive—Ex., His plan to steal the gold and hide it failed.
x. Adjective—Ex., The way to win is to work.
y. Adverb.
1. Modifying a verb.
a. Expressing purpose—Ex., They work to win.
b. Complementary—Ex., You ought to succeed.
2. Modifying an adjective—Ex., We were eager to be off.
3. Modifying an adverb—Ex., Do not be too headstrong to see your faults.
z. Independent—Ex., To speak plainly, I blame you for your neglect.
c. Verbal forms.
y. Participles.
1. Adjective.
z. Gerunds.
1. Noun.
2. Auxiliary.

V. Adverb.
A. Classes.
1. According to use.
a. Limiting—Ex., He talks quietly.
b. Interrogative—Ex., When will you come?
c. Conjunctive—Ex., They went to Rome, where they remained.
2. According to form.
a. Simple—Ex., Soon.
b. Flexional—Ex., Noisily.
c. Phrasal—Ex., At once.
3. According to meaning.
a. Time—Ex., Obey now.
b. Place—Ex., Put it here.
c. Manner—Ex., He sings well.
d. Degree—Ex., The horse runs very fast.
e. Cause—Ex., Why did you come?
f. Assertion and denial—Ex., Yes, no.

B. Modifications.
1. Comparison.
a. Degree.
x. Positive.
y. Comparative.
z. Superlative.

C. Use.
1. Modifier of verb—Ex., She walked softly.
2. Modifier of adjective—Ex., It is a very pretty hat.
3. Modifier of adverb—Ex., The child danced very gracefully.

VI. Prepositions.
A. Classes.
1. Simple—Ex., To. 2. Compound—Ex., According to.
B. Use.
1. In "prepositional phrase"—Ex., On the floor.
2. As part of verb phrases—Ex., Approve of.
VII. Conjunction.
A. Classes.
1. According to use.
a. Co-ordinating.
y. Word—Ex., And.
z. Double (Correlatives)—Ex., Both, and.
b. Subordinating.
y. Adverbial—Ex., If you will go, I will.
z. Introductory (Followed by noun clause)—Ex., He knows that you came.
2. According to form.
a. Simple—Ex., When. b. Phrasal—Ex., As if.
VIII. Interjections.
A. Classes.
1. Simple—Ex., Oh. 3. Phrasal—Ex., Mercy on me!
2. Secondary—Ex., Farewell.

Wynken, Blynken, and Nod.

Wynken, Blynken, and Nod one night
Sailed off in a wooden shoe—
Sailed on a river of misty light
Into a sea of dew.
"Where are you going, and what do you wish?"
The old moon asked the three.
"We have come to fish for the herring-fish
That live in this beautiful sea;
Nets of gold and silver have we,"
Said Wynken, Blynken, and Nod.

The old man laughed and sang a song,
As they rocked in the wooden shoe;
And the wind that sped them all night long
Ruffled the waves of dew;
The little stars were the herring-fish
That lived in the beautiful sea.
"Now cast your net wherever you wish,
But never afraid are we!"
So cried the stars to the fishermen three,
Wynken, Blynken, and Nod.

All night long their nets they threw
For the fish in the twinkling foam,
Then down from the sky came the wooden shoe
Bringing the fishermen home;
'Twas all so pretty a sail, it seemed
As if it could not be;
And some folks thought 'twas a dream they'd dreamed
Of sailing that beautiful sea;
But I shall name you the fishermen three:
Wynken, Blynken, and Nod.

Wynken and Blynken are two little eyes,
And Nod is a little head,
And the wooden shoe that sailed the skies
It is a wee one's trundle-bed;
So shut your eyes while mother sings
Of wonderful sights that be,
And you shall see the beautiful things
As you rock on the misty sea
Where the old shoe rocked the fishermen three,
Wynken, Blynken, and Nod. —*Field.*

Rhetoric

NO race of people needs more to study the art of composition than does the American. Through the necessity of developing our country and bringing it to its present place among the nations of the world, the American citizen has not had much time or inclination for the development of art, either in himself or in his country. Even to-day the public is crying out for the practical, the business side of education, to the detriment of a broader culture than that measured by financial success.

If the child is of a practical turn of mind, his wit will become keener, his expression more diplomatic through the study of the best in literature and art. To the skillful, conscientious teacher everything is but a means to an end; and that end is the development of the child's needs in after life. It must be granted that the speaking and writing English of our average men and women does not meet their needs; blunt to the point of being discourteous, concise to the point of being ungrammatical, this English is the result of dwelling too much on the practical, or so-called practical courses.

Is grace of speech a necessary opponent of clearness? Is it not rather a charm which adds to effectiveness in expression? A live, original narrative, a well-worded description, or a bit of figurative language bordering even on the poetical, may seem not to bring any definite results in the struggle for bread and butter which engages the mass of our pupils, but clearness of tongue and pen can never fail to make that struggle easier. The remark is often made that we cannot hope to make novelists and poets of the larger proportion of our pupils and in consequence the detailed study of narrative, of description, of rhyme and meter is out of place in our public schools. If the majority had the genius of novelists and poets, the training in these things would not be so imperative. It is for the mind deprived of such natural gifts that the study of rhetoric is an absolute necessity if it is to put to use the knowledge acquired in other departments. Let us then shut our ears to these complaints, and fix our eyes on a larger future; a future where the American may have the wit of the French and the soft grace of the Italian in his speech, as well as the substantial worth of the harsh Americanized English.

But difficulties loom up in the immediate pathway to this future; difficulties which every teacher of rhetoric recognizes and solves according to his ability. No subject is so generally unpopular among students as rhetoric. This is the first trouble that the teacher needs to recognize, but with that recognition must come also the realization that no subject need be less unpopular. Constant variety in the work, tact in correction, a use of all the knowledge one has of human nature and a never-failing faith in results are some of the things that will banish this difficulty.

How can the work be varied? Just a few suggestions may open the way to other possibilities. The one which is most universal is the combination of classic study with rhetoric. While it is unwise to use the classic merely as an illustration for the work in rhetoric, it is equally unwise to choose something which cannot be turned to account in this way. Many of our most famous English writers obtained their skill through reading the best in literature and trying to reproduce the style of the great masters. Robert Louis Stevenson was not con-

sidered a very creditable student at Edinburgh University, but he knew what he was about in those days of apparently aimless browsing among books. Reading, then writing and rewriting with never-tiring energy, he acquired the marvelous grace and charm which placed him among the masters of style in our language.

If *narrative* is being studied in rhetoric, strengthen it by reading some good stories which illustrate the *where, when,* and *who* of an introduction; which bring out clearly the *climax,* the interpretation of the plot and character, and the purpose of description in plot development. The pupils will quickly recognize these elements, or the lack of them, and their own stories will begin to develop in a much more definite and correct manner. The work in *argument* can be varied and illuminated in much the same manner. Burke's *Speech on the Conciliation of the American Colonies* furnishes excellent material for advanced pupils in this, and some orators, as Webster, furnish the same for younger pupils. Let the pupil see clearly before him an illustration of proof through elimination, by precedent, by analogy, and many of his troubles will vanish. This will be particularly true, if subjects for debates on present-day topics are given out to be worked up in original examples of these different branches of argument.

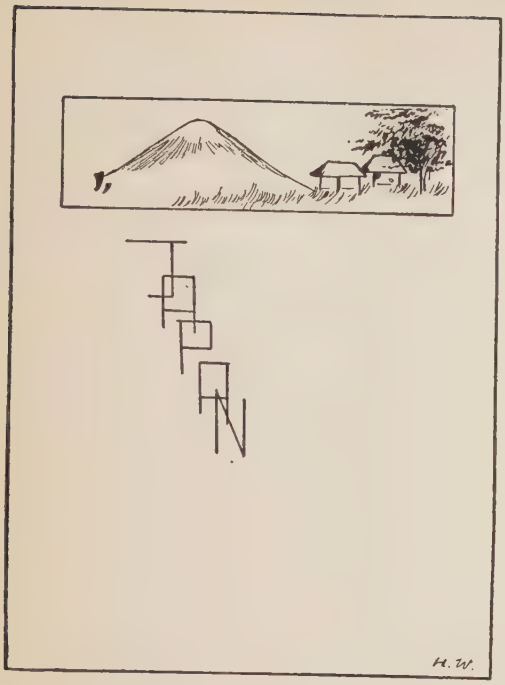
Oral English can be enlivened by having reports on current events. This work sharpens the pupil's wits by bringing him in contact with daily happenings. These reports can be varied by good "funny" stories, so told as to make the point come unexpectedly and skillfully. The ability to tell a good story is no mean acquisition, either in business or social life.

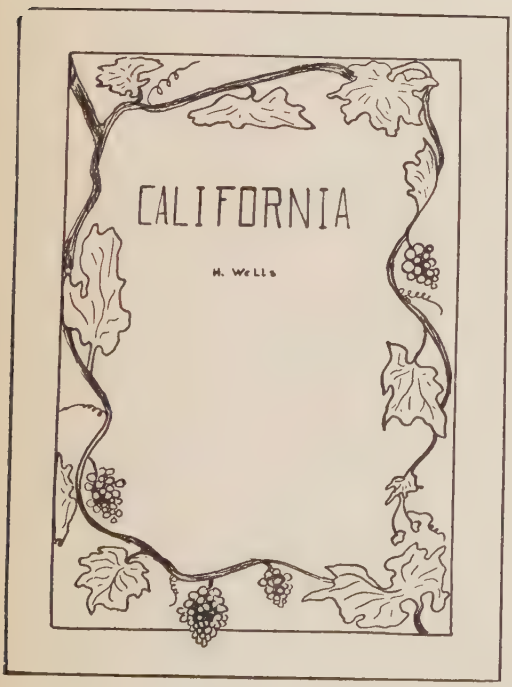
Too much adverse criticism is another reason for the unpopularity of rhetoric. The drudgery of writing must be made worth while by the reward of praise and appreciation by the teacher and fellow pupil. Constant correction of faults not only will kill all life in writing, but will increase rather than decrease the technical errors. The pupil comes to have his mind filled with these, and soon shifts the dreary weight of them to the teacher, who continues his monotonous red ink marks, not realizing that he is carrying the burden that should belong to the pupil.

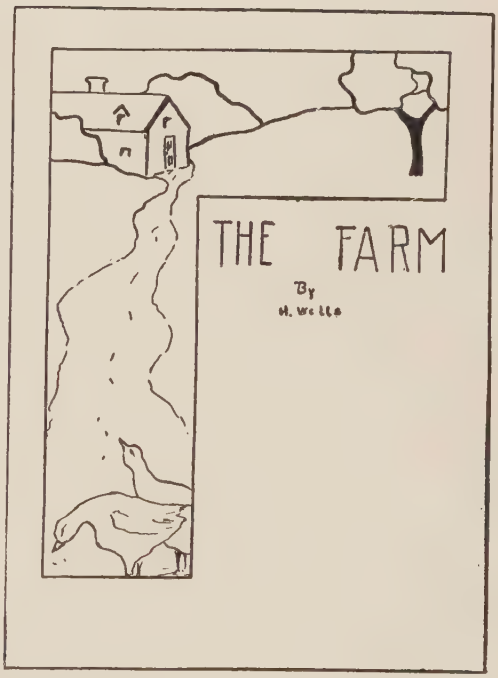
Make it a rule never to read a poor theme before the class, except in rare instances where some weakness of the entire class may possibly be brought home to them. Read the good themes, and read them often yourself, giving to them your best expression and making the most of them in every possible way. Many pupils will awaken to possibilities within themselves by hearing their themes read as if there was something worth while in them. This plan has a good effect on the other members of the class, as the example of one of their members producing a theme which is interesting and unusual makes them question their power to do as well.

But faults must be corrected and the question arises, when can the disagreeable task be done the most advantageously? Certain mistakes are quite likely to prevail in classes and when such is the case the teacher can save time, and the sensitive feelings of the individual pupils, by putting a list of corrections for these before the pupils and then holding them responsible for future elimination of such errors. Again, a paragraph, very poor in sentence structure, capitalization, and punctuation, may be copied on the blackboard and the correction made by the class during a recitation period. It is always best to keep the name of the pupil who has written the faulty paragraph a secret: nothing is gained by humiliating him before the class and much may be lost.

This class work will do much toward eliminating individual correction, but there will always remain some whose work continues to be full of grammatical errors, faults of punctuation and capitalization. Private consultation seems to be the best solution of the difficulty with these, whether the faults be the result of carelessness or lack of ability, the pupil has to deal directly with you at these consultations and is bound to improve. No other method can so effectually clear a school of poor English as this private work, but, in order to do this and the rest of the work of the course, it is almost necessary for the teacher to have one hour a day, free from recitation, to give to these poor pupils.

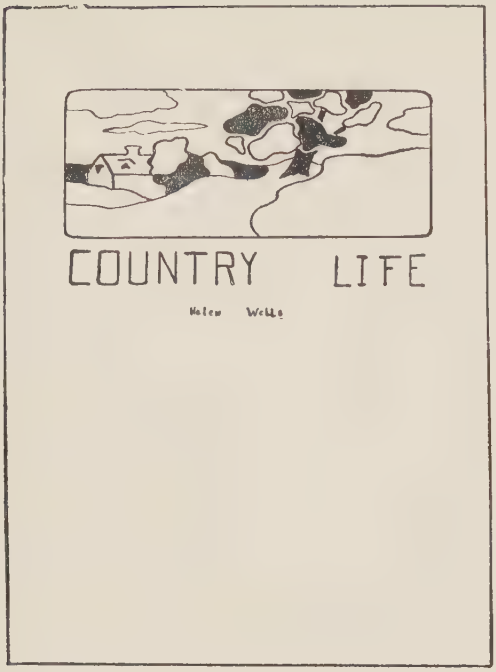


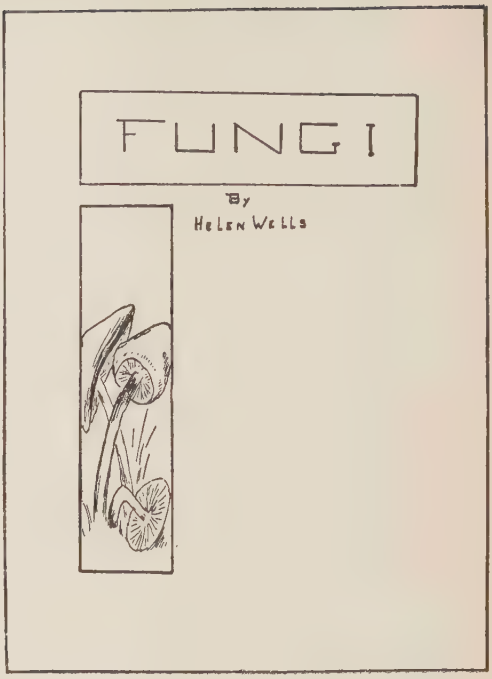


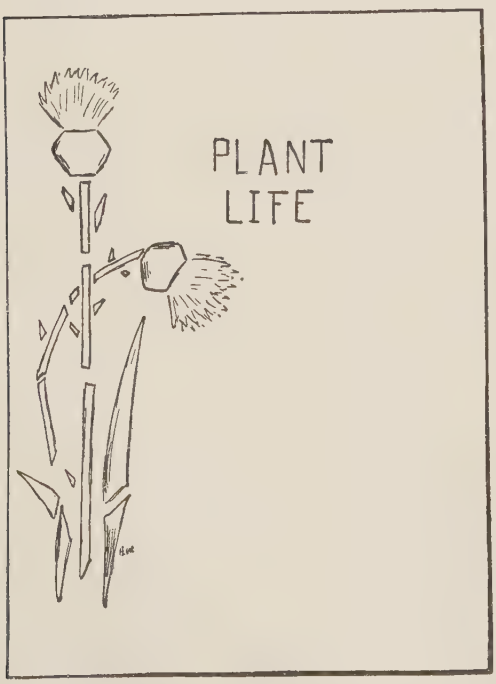


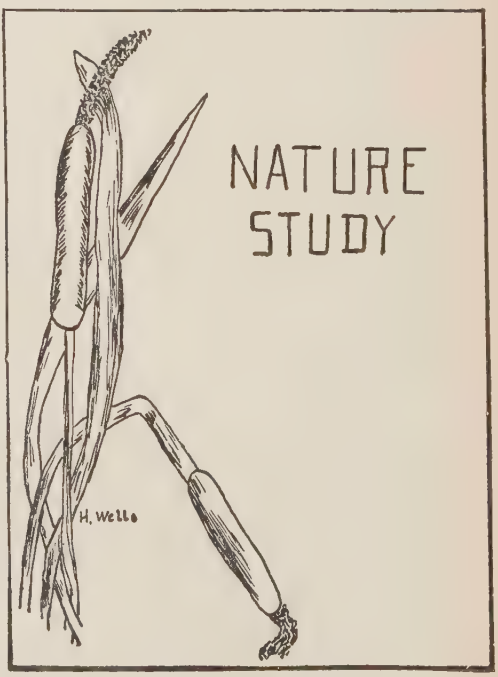
SUGGESTIONS FOR THEME COVERS.

(Prepared from the work of Helen Wells, a pupil in the public schools at Marshalltown, Iowa.)









SUGGESTIONS FOR THEME COVERS.

(Prepared from the work of Helen Wells, a pupil in the public schools at Marshalltown, Iowa.)

An impetus to good work can be given in these English classes by a definite, material aim in each chapter. Let the pupil feel that every step of the work is to be accounted for later in a final theme, which in length, material, and construction represents his advance. Have him bind this in the form of a book, using bristol board for a cover and decorating it with some design which is in keeping with his subject. It will be found that pupils will take unusual pride in these themes. The satisfaction of having produced something that is his own, a rounded whole in thought and structure, has an effect on a boy's character that works for good, not only in rhetoric, but in higher ideals in every line of his work.

In most schools the study of rhetoric extends over the first two years of English in the high school: as a general thing the course is divided by having narration and description in the first and exposition and argument in the second. A short study of poetry, its different classes and verse form for each, and a discussion of figures of speech are brought into the course as early as possible, in order that they may be understood in the study of classics.

In the introduction of composition work there are certain general points which the pupil needs to have brought forcibly before him. One is *What to write about* and the other is *How to write.* The first, the selection of the subject, involves two necessary things, interest and knowledge. No boy or girl can write on a subject in which he has no interest, and it follows that he cannot be interested without a knowledge of the subject. The *how* of writing is the entire theme of composition, but there are a few general rules which may help to clear the way of much indefiniteness in the beginning.

1. Spend some time thinking before attempting to write: settling definitely in your mind what is to be in the introduction, what points will be necessary to make clear the body of the theme, and how much of a conclusion will be needed.
2. Be sincere and simple: write what you know to be true and express it in as simple words and sentences as possible.
3. Work straight to your point, eliminating everything which does not clearly advance your thought.
4. When the theme is completed read it aloud: if the same word has been repeated the sound will be detected: if the meaning is not clear the fault may be found to be with the punctuation or with the faulty structure.

In the treatment of the main divisions of composition, the following outlines may furnish helpful suggestions:

Narration.

I. Definition.
  A. Story-telling.
II. Kinds.
  A. Chronicle.
    1. Things to remember.
      a. Whom you are writing for.
      b. Selection of details for interest and accuracy.
    2. Suggestive topics.
      a. Diary of Ben Gunn (*Treasure Island*).
      b. Page from the *Record of John Alden.*
      c. A line a day *While Cruising the Ocean.*
      d. A page from the *Diary of Daniel Boone.*
  B. Incident.
    1. Definition.
      a. A single action without complication in development and without formal introduction or conclusion.

2. Suggested topics.
    a. *The Lost Dime.*
    b. *A Stolen Ride.*
    c. *My Last Night's Burglar.*

C. Story.
  1. Parts.
    a. Introduction.
      1. Contents.
        a. The *when, where,* and *who* of the story.
      2. Expression in two ways.
        a. Complete explanation at beginning of story.
        b. A few details at first, with other necessary facts brought in, as necessary, through the story.
    b. Plot.
      1. Parts.
        a. Incentive moment: the point where the interest is centered.
        b. Climax: the turning point.
    c. Conclusion.
      1. Modern stories omit the formal conclusion.
        2. Possible ways of handling.
          a. Point indirect moral.
          b. Connect ending with beginning by reference to time or place.

D. Method of character development in narrative.
  1. Through action.
  2. Through speech.
  3. Exercises to illustrate.
    a. Name three characters in *Ivanhoe* where character is shown through action; through speech; through the author's description.
    b. Which predominates in the following, action or character development; in which are they fairly balanced?
      1. *Treasure Island.*
      2. *Rip Van Winkle.*
      3. *Lady of the Lake.*
      4. *Silas Marner.*
    c. Write a short sketch in which a character is revealed through description, previous to the action.

Description.

I. Definition.

A. Representation of an image to the mind through words.

B. Necessary characteristics.
  1. Point of view of writer.
    a. This may be directly stated or incidentally brought out.
    b. Only such details as could be naturally seen from the point of view selected can be brought into the description.
  2. Mood of writer, or assumed mood to give the article the correct tone.
  3. Details.
    a. Kind.
      1. Essential.
      2. Minor.
    b. Arrangement.
      1. According to natural position in space.

C. Purpose.
   1. To create an impression, as in a description of travel.
      Examples:
         a. Irving's *Alhambra.*
         b. Stevenson's *Treasure Island.*
   2. To create background for narratives.
   3. To indicate character.

D. Suggestions for studying.
   1. Give an oral description of some view or building to the class so that they can tell what it is without being told the name.
   2. Use the same plan with a person.
   3. Write a suitable background for a happy story: for a story depicting sorrow or crime.
   4. Tell a story which you have recently read, to illustrate well-arranged details of description.
   5. Write a page description of some place, introducing the elements of movement, color, and odor.

Exposition.

I. Definition.
   A. The form of discourse which consists of explanation, free from personal prejudice, and arranged with the purpose of giving information.

II. Kinds.
   A. Definition, or the simplest form of exposition.
      1. Parts.
         a. Genus or class.
         b. Difference or details which distinguish this particular thing from others of the same class.
      2. Cautions.
         a. Be exact about expressing the genus in the definition. "A chair is for sitting in," or "Spring is when the frost comes out of the ground," may express the idea, but the *genus* is omitted and consequently the definition is faulty.
         b. Be careful in the selection of details: unless they distinguish the article from others of the same *genus* their effect is to confuse rather than to make clear.
   B. Complex ideas of action or machinery.
      1. Treatment.
         a. Through analysis.
         b. Through diagram.
         c. Through illustration.
   C. Formal exposition.
      1. Introduction.
         a. Explanation of subject.
         b. The arousing of interest.
         c. Plan.
      2. Body.
         a. Careful following of plan as indicated in introduction.
      3. Conclusion.
         a. Summary.
         b. Personal opinion.
         c. Possible future of object.

III. Suitable Subjects for Exposition.
The Making of a Magazine.
Liquid Air.
The Aëroplane.
How to Play Tennis.
Marking off Golf Links.

Argument.

I. Definition.
A. Exposition which includes persuasion.
II. Things to Remember.
A. In choice of subject.
1. Within the pupil's experience or understanding.
2. Concrete question of present interest.
3. Questions with two broad sides, equally capable of proof.
B. Early determining of major and minor premises.
III. Organization.
A. Introduction.
1. Explanation of subject.
2. History of subject.
3. Outline of plan of attack.
B. Brief.
1. Well-established methods of proof.
a. Through precedent.
b. Appeal to common sense.
c. Argument from analogy.
d. Through elimination.
C. Conclusion.
1. Summary.
2. Persuasion, including show of emotion.

Study of the Paragraph.

I. Requirements.
A. Unity.
1. That quality which admits of but one topic within a paragraph.
B. Coherence.
1. The arrangement of the separate thoughts in a paragraph so that the central theme is logically developed.
C. Emphasis.
1. Development of the theme in steps of added importance.
II. Different Methods of Developing.
A. By enumeration of details.
B. By contrast.
C. By time order.
D. By cause and effect.
E. By specific instance.
F. By comparison.
III. Exterior Form.
A. Indicated through indentation.

The Sentence.

I. Grammatical Classification (See Grammar for definitions and examples).
- A. As to form.
  1. Simple.
  2. Complex.
  3. Compound.
- B. As to use.
  1. Declarative.
  2. Imperative.
  3. Exclamatory.
  4. Interrogative.

II. Rhetorical Classification.
- A. Loose.
  1. Definition: A sentence that permits of an ending in two or more places with complete sense.
  2. Example: We rode on, scarcely stopping for food, and with no feeling but an all consuming fear.
- B. Balanced.
  1. Definition: A sentence made up of two members, similar in structure but often contrasted in meaning.
  2. Example: You can lead a horse to water, but you can not make him drink.
- C. Periodic.
  1. Definition: A sentence that does not complete the main thought until the close of the sentence.
  2. Example: The great sorrow he had had, the terrible sacrifices he had made, the loss of the friends whom he had trusted, swept across his memory.

Figures of Speech.

I. Definition.
- A. Variations of the literal or ordinary forms of expression by imaginative expression.

II. Figures of Practical Service.
- A. Simile.
  1. Definition.
     a. An expression of resemblance between two different things, usually introduced by such words as *like* or *as*.
  2. Example.
     a. "I wandered lonely as a cloud
        That floats on high o'er vales and hills."
- B. Metaphor.
  1. Definition.
     a. An implied comparison.
  2. Example.
     a. "All the world's a stage."
- C. Personification.
  1. Definition.
     a. Attributing life to inanimate objects.
  2. Examples.
     a. The brook *murmured*.
     b. The *treacherous* rocks were hidden.
     c. Oh Solitude, where are thy *charms?*

Reading

> Some read to think, these are rare; some to write, these are common; and some read to talk, and these form the great majority. The first page of an author not unfrequently suffices all the purposes of this latter class, of whom it may be said, they treat books as some do lords; they inform themselves of their titles, and then boast of an intimate acquaintance. —*Colton.*

READING is the basis of all self-development in education. This truth is so evident that its very familiarity makes us careless of its significance. Until the full importance of reading is realized by teachers many boys and girls will continue to grow into men and women whose *self-development* is seriously hindered by their inability to read intelligently. How large a per cent. of our people at present can grasp the thought of any printed pages beyond that of the daily newspaper, the modern novel, or the rhyme of a medium poet? The heavier reading which develops the reasoning power and the sense of justice, that does so much toward producing broad-minded citizenship, lies untouched by the mass of our citizens. We are so accustomed to thinking that the kind of reading one does is dictated by his tastes that the possibilities of an early formation of better tastes are forgotten. The man or woman who finds difficulty in pronunciation and in a clear interpretation of thought through the expression of the voice in this simple, everyday reading is crippled to such an extent in attempting heavier reading that the hard work and time involved make him abandon it.

How far are the public schools responsible for this lack of intelligent reading? It seems a long stretch from the stumbling reading of a lazy, sturdy lad of ten to that of the man who exerts the rights of citizenship and should be equipped to investigate those rights for himself and others. But if that lad, when grown to manhood, still reads in a stumbling, laborious fashion; if through his inability to read he has been unable to make any progress in self-development, then it behooves the teachers of our country to take up this question of poor reading and solve it.

Nor does the question of self-development cover the whole result of good or poor reading. How many people are there of our acquaintance who can read to us for half an hour in a simple, easy manner so that the thought remains with us, clear cut and vivid from the reader's interpretation? The number is limited, and, if limited among people who have at least completed our public school course, what can be said of those who drop out at the close of the grammar grade work? They are the ones who come from illiterate families where the necessity of broadening the mental view is paramount. One good reader, alive and well instructed, although only a pupil of our grades, can do more toward easing the burden of illiteracy in his home, toward lifting the ideals of that home, than any other influence that we can send to it from our public schools.

The foundations of self-development, the possibilities of giving pleasure in a social way, the moral and intellectual influence possible and the growth of a better citizenship through more intellectual reading, are far-reaching visions to which to lift our eyes from the droning, stammering half-hour reading lesson. But if once our eyes can catch the gleam of the vision, an illumination will flash upon the dullness that will scatter it.

In looking back over our own school days, is it true that we find the memory of the reading hour anything but one of definite action or enthusiastic interest? How many reading classes do we find to-day in which a definite plan of progress is carried out with enthusiasm by the teacher and responded to in the same manner by the pupils? What was the matter in the past? What is the difficulty at present? One answer may be formed in the very apparent ease with which many teachers dispose of the reading hour. No attention is given to the preparation of the day's assignment in many cases and the "next lesson" is droned through on successive days or "taken over," if there are too many mispronounced words. Many realize the need of different and better reading classes, but they have been unable to accomplish the result desired. The following plans and suggestions have been tried by those who have found them successful in arousing interest and securing results. Perhaps, the application of them more generally will remedy the difficulty for others.

General Directions.

First of all there must be an awakening of the teacher to the view point of the pupil. The lesson so simple to the teacher, so sifted free of all ideas in numerous preceding classes, is still a fresh field of interest to the pupil if he is skillfully led into it. Approach him through the thought and very often the interpretation of that thought will cause him to give the sentence correct expression in reading it. It is a matter of minor importance, whether the boy stands on both feet or one, whether the book is held correctly or not. Let him alone, if he has the thought himself and can read it to the class. Gradually the influence of the printed page and the interest in it will lead the boy to forget his body and then the battle is won. Follow with a few directions about standing and holding the book, explaining the added ease with which one's voice carries, if the head is up and the body is erect. Bring one of the best pupils to the front of the room to illustrate these points and follow with the others, introducing the poorest ones unexpectedly so that they will not be embarrassed by waiting their turn. The plan will not only interest the class in seeing the truth concerning the carrying of the voice, but the pupil has come before the class. As that is the next step to be accomplished, it is wise to do it without any announcement of the fact.

No really good work in reading can be done until the pupil faces his audience. Until then the recitation on his part is for the teacher, who is a taskmaster and critic in the pupil's eyes. Give the boy an audience interested in the same thing that he is and he will soon become alive to the sense of power which comes from holding the attention of others. To keep that attention he must give the class something to think about and he soon sees that a listless pronunciation of words does not have the desired effect; he must know the thought back of the words and give it proper interpretation.

There are those in every class who can get the thought in silent reading, but who are entirely without the ability to give that thought expression through their voice. These are the ones it is most necessary to consider and it is for these the teacher must bring in the mechanics of reading. Every teacher should know these mechanics well enough to recognize which one will remedy the difficulty in a child's expression. Only the simplest and most practical are illustrated here. A complete table is given at the close of the chapter for those who care to go into the matter more deeply.

Time.

Every class has the pupil who reads too fast or too slow. Merely telling him to read the paragraph over and read more slowly will not correct this fault. Unless he grasps the reason, the connection between the thought and the correct

expression of the thought, he will go back to his characteristic rapid or slow reading at the next opportunity. The trouble with him is that he doesn't know the meaning of *Time* in connection with reading. Teach him this and you have given him a remedy for this trouble. The best way to do this is to give him contrasting passages to read, one directly after the other so that he can see the necessity for thinking of time in his utterance of the printed verse. First take the following:

Through all the long midsummer day
The meadow sides are sweet with hay.
I seek the coolest sheltered seat
Just where the field and forest meet,—
Where grow the pine trees tall and bland,
The ancient oaks austere and grand,
Amid fringy roots and pebbles fret
The ripples of the rivulet.

Or this:

The curfew tolls the knell of parting day;
The lowing herd winds slowly o'er the lea;
The plowman homeward plods his weary way,
And leaves the world to darkness and to me.

Any child who has the mental ability to read the words of these verses can easily be taught that the thought in them is not suited to rapid expression. Follow these with the succeeding selections to show that there is the same connection between thoughts based on swift action and the vocal expression of the thought, that there is between the above meditative themes and their deliberate expression.

Meanwhile, impatient to mount and ride,
Booted and spurred, with a heavy stride
On the opposite shore walked Paul Revere.
Now he patted his horse's side,
Now gazed at the landscape far and near,
Then, impetuous, stamped the earth
And turned and tightened his saddle girth;
A hurry of hoofs in a village street,
A shape in the moonlight, a bulk in the dark,
And beneath, from the pebbles, in passing, a spark
Struck out by a steed flying fearless and fleet:
That was all! And yet, through the gloom and the light,
The fate of a nation was riding that night;
And the spark struck out by that steed, in his flight,
Kindled the land into flame with the heat.

This decided contrast brought before the pupil will at least show him the necessity of varying his time expression. After the drill on these exercises, it would be well to take the school reader and have the pupils select lessons which demand particular attention to this quality. Let the pupil explain his reason for the selection to the class: the connections between the thought and its rapid or slow utterance. Follow with several recitations in which contrasting lessons illustrating the idea of time are taken up. These lessons should come from the reader in everyday use and anywhere in the book where the examples best answer the purpose.

Pitch.

The same psychological process, as that discussed under *Time,* is involved in the development of the relations between the thought of a lesson and the pitch of a pupil's voice. Just as we have pupils who read everything fast or everything slow, we also have these who read all selections on a high pitched voice or others who never vary from a low tone. Ask the pupil the following questions:

What are you reading about? What is the principal thought?

If you were talking to some one on such a subject, would you use the same tone you are using in reading about it?

Follow these questions with the examples below, where it is evident the voice must grow tense with excitement or soften in sympathy. After these examples go back to the lesson in the book, establish the connection between the thought and the pitch of the voice, and have the lesson read by those who can do it best. Proceed to have contrasting lessons selected throughout the book, until every member of the class begins to modulate his time according to the necessity demanded by the thought.

Hark to the bugle's roundelay!
Boot and saddle! Up and away!
Mount and ride as ye ne'er rode before;
Spur till your horses' flanks run gore;
Ride for the sake of human lives;
Ride as ye would were your sisters and wives
Cowering under their scalping knives.
Boot and saddle! Away, away!

The barley-harvest was nodding white,
When my children died on the rocky height,
And the reapers were singing on hill and plain,
When I came to my task of sorrow and pain,
But now the season of rain is nigh,
The sun is dim in the thickening sky,
And the clouds in the sullen darkness rest
Where he hides his light at the doors of the west.
I hear the howl of the wind that brings
The long drear storm on its heavy wings,
But the howling wind, and the driving rain,
Will beat on my houseless head in vain;
I shall stay, from my murdered sons to scare
The beasts of the desert and fowls of the air.

Quality.

When the more evident questions of *time* and *pitch* are out of the way, the elusive one of *quality* can be taken up. The quality of a tone depends entirely on the emotions excited in the reader by the thought of the selection before him. Children are so strongly imitative that the necessary emotion can be aroused in them by hearing the selection read properly. This possibility can be strengthened greatly if the atmosphere is created before by an explanation of the circumstances connected with the writing of the selection. As an example of this, Robert Louis Stevenson's *Requiem,* written when he was broken in health and yet echoing his sturdy love of life and its beautiful pleasures, will appeal to boys and girls.

Under the wide and starry sky,
Dig the grave and let me lie,
Glad did I live and gladly die,
And I laid me down with a will.

This be the verse you grave for me;
Here he lies where he longs to be;
Home is the hunter, home from sea,
And the hunter home from the hill.

But the human voice has as many qualities as the heart has emotions. Some of these have been given names by professional instructors in reading. Out of this list several can be brought before grade pupils with exceedingly good results. It is better to banish the technical terms—Orotund, Guttural, Aspirate, etc.—and put in their places names suggested by the emotion to which they give expression, such as *grave* and *deep, bright* and *ringing, harsh* and *stern,* etc. The examples given below will help the pupil to understand and to apply these terms; if he understands definitely what makes his reading monotonous and can give a name to the quality he should bring into each selection, he has taken a long step toward variety of expression in his reading.

Illustration of *Bright* and *Ringing* Quality.

When the frost is on the pumpkin and the fodder's in the shock
And you hear the hyouck and gobble of the struttin' turkey-cock,
And the clackin' of the guineas, and the cluckin' of the hens,
And the rooster's hallylooyrs as he tip-toes on the fence;
O it's then's the time a feller is a-feelin' at his best,
With the risin' sun to greet him from a night of peaceful rest,
As he leaves the house, bare-headed, and goes out to feed the stock,
When the frost is on the pumpkin and the fodder's in the shock.

—*Riley.*

Dark or *Covered* Tone.

So live, that when thy summons comes to join
The innumerable caravan, which moves
To that mysterious realm where each shall take
His chamber in the silent halls of death,
Thou go not, like the quarry-slave at night,
Scourged to his dungeon; but sustained and soothed
By an unfaltering trust, approach thy grave
Like one who wraps the drapery of his couch
About him, and lies down to pleasant dreams.

—*Bryant.*

Sympathetic Quality.

I stood and watched by the window
The noiseless work of the sky,
And the sudden flurries of snow-birds,
Like brown leaves whirling by.

And again I looked at the snow-fall,
And thought of the leaden sky
That arched o'er our first great sorrow
When that mound was arched so high.

Up spoke our own little Mabel,
Saying, "Father, who makes it snow?"
And I told of the good All-father
Who cares for us here below.

—*Lowell.*

Light, Soft Tone.

It was many and many a year ago,
In a kingdom by the sea,
That a maiden there lived whom you may know
By the name of Annabel Lee;
And this maiden she lived with no other thought
Than to love and be loved by me.

And this was the reason that, long ago,
In this kingdom by the sea,
A wind blew out of a cloud, chilling
My beautiful Annabel Lee;
So that her high born kinsman came
And bore her away from me.

—*Poe.*

A complete table of these qualities will be found at the close of this chapter, with the help of which, and the start made with the above work, the more delicate tone qualities can be developed.

Force.

Closely allied to quality of tone is *force,* but the relationship permits a distinct difference to exist, one which the teacher should clearly appreciate, even if it is thought best not to confuse the pupil with another term. Just as the *quality* of the tone interprets the kind of emotion, *force* interprets the amount of energy

(Method Book, Opp. 389)

CORRECT POSITIONS IN PUBLIC READING.

1. Designation.
2. Disdain.
3. Fear.
4. Meditation.

to be used in voicing that emotion. This is the most difficult element to be secured in reading and can only be obtained when the pupil has the thought of the lesson so stimulated by enthusiasm that his listlessness vanishes and his expression comes spontaneously. At this point, activity, not only mental, but physical as well, must inspire the class. A swift drill in physical exercises preceding the lesson, with abundance of fresh air then and throughout the recitation, will do much toward banishing the indifferent attitude of the class. Begin the reading hour with concert reading of the selection given below, and follow that by individual reading of the same. The directions used in the development of the other expressional and tone qualities can be followed here with regard to taking up the lessons together that have the need of force in their interpretation.

Hark! 'tis the voice of the mountain,
  And it speaks to our heart in its pride,
As it tells of the bearing of heroes,
  Who compassed its summits and died!
How they gathered to strife as the eagles,
  When the foeman had clambered the height!
How with scent keen and eager as eagles,
  They hunted them down for the fight!

Hark! through the gorge of the valley,
  'Tis the bugle that tells of the foe;
Our own quickly sounds for the rally,
  And we snatch down the rifle and go.

. . . . . .

The British, the Tories are on us;
  And now is the moment to prove
To the women whose virtues have won us,
  That our virtues are worthy their love!
They have swept the vast valleys below us,
  With fire, to the hills from the sea;
And here would they seek to o'erthrow us,
  In a realm which our eagles make free!

Detailed Shades of Expression.

If the main thought of the reading can be produced through an understanding of *time, pitch, tone, quality,* and *force,* the meaning within the sentences will often take care of itself. But if the pupil fails to do this, the matters of *grouping,* of *subordination,* and *emphasis* should be dwelt upon.

Grouping is the setting off of words which make a thought unit. Just as punctuation is a guide to the grammatical structure of the sentence, *grouping* is a guide to the thought structure. Children who are naturally good readers will do this instinctively, but there are those who will need help. In this matter definite direction is impossible, for the child must *feel* the thought group. One of our best instructors in reading says there is only one universal rule about grouping: "There is never more than one emphatic word in a group. If a reader decides to emphasize an additional word, he will instinctively make two groups out of what he had before made but one." Go over the lessons with the pupils in the recitation period until they begin to pick out the groups correctly. Let them use their individuality just as far as possible. It will be found that the boy or girl who is an expressive reader will quickly see the advantage of careful grouping: the careless one will not, but the habit will grow upon him unconsciously from the work of the others.

From "Incident of the French Camp."

You know we French | stormed Ratisbon; |
A mile or so away. | |
On a little mound, | Napoleon
Stood | on the storming day. |
With neck out-thrust, | you fancy how |
Legs wide, | arms locked behind, |
As if to balance the prone brow |
Oppressive | with his mind. | |

It will be seen from this example that the grouping corresponds in places to the punctuation, while in others it does not. The same will be seen from the following selections from the *Village Blacksmith:*

He goes on Sunday to the church, |
And sits among his boys; |
He hears the parson pray and preach: |
He hears his daughter's voice, |
Singing in the village choir, |
And it makes his heart rejoice. |

Toiling, | rejoicing, | sorrowing, |
Onward through life he goes; |
Each morning | sees some task begun, |
Each evening | sees it close; |
Something attempted | something done, |
Has earned a night's repose. |

After the subject of *grouping* is understood, the next logical step is that of *subordination.* This is one of the most important devices of expression, as it solves for the hearer the thought value of the different groups: the important thoughts standing out clearly in the reader's tones, the modifying or subordinate thoughts dropping into the background by being given a lower tone. In reading the following selection, notice how the words in *Italics* express subordinated thoughts and how the voice must be toned to express them:

"Rob, *having sold out his share in MacDougall's boat,* bought jerseys and black boots and yellow oilskins for his companions; so that the crew, *if they were slightly built,* looked smart enough as they went down to the slip to overhaul the *Mary of Argyle.*"—From *The Four Macniols* by William Black.

Expression does for the words within the group what grouping and subordination do for the thought within the unit. Not much difficulty can come from this after the work on grouping has been well done. However, it may be well to give the pupil a few sentences in which to mark the important words.

Reading by Grades.

Intermediate.

The general directions, given previously, should be begun in these grades and carried on as far within each year as the mental development of the pupils will permit. It will be found that they will grasp the logic of the directions very well, but putting them into continued use will take not only days but months.

The material within the school reader, first of all, should be *classified* by the teacher according to the order of development of the vocal and expressional qualities of the pupils. The interest of the class will be increased by using the lessons as illustrations of these different steps. This will lead the pupil to feel that the day's work is meant to meet his particular need and therefore must appeal to him more than an arbitrary assignment of the "next lesson."

The use of the dictionary should begin as early as the fourth year. Careful directions and frequent drills in the use of the dictionary, in some cases occupy-

ing entire reading hours, will do much toward simplifying later work. The following suggestions are given to aid in making definite requirements:

I. Each pupil should own his own dictionary, if possible, and it should be the same as that of the other members of the class, so that the teacher will be enabled to make definite and uniform requirements.

II. Each division of a dictionary has individual value and the teacher should carefully call attention to and explain each part.

III. Continual and thorough study should be given the table of diacritical marks (see page 127).

IV. Because of the modern methods of teaching reading in the primary grades, young pupils do not know the relative position of the letters in alphabetical order. Have the class turn rapidly from letter to letter in the dictionary, noticing the proportion of space given to each and the arrangement of words in sequence of these letters.

V. The fact that different meanings are given under a word needs explanation: sentence work illustrating the use of the word in different ways ought to be given.

The reward for the time and labor given to the study of these things will be more than repaid in the improvement in accuracy of study habits, especially in the desire of the pupil to pass from the dictionary to other reference books, and in the satisfaction of having reduced a difficulty to a tool which will be the pupil's help through life.

Attention to correct articulation begins, of course, in the primary grades, but the necessity of that attention increases rather than decreases throughout the intermediate grades. It is generally a mistake to interrupt a pupil while he is reading to correct a fault in articulation, as he loses the thought as well as the tone necessary for the expression of that thought, and becomes discouraged and embarrassed. A few minutes, given to the entire class, at the beginning of the hour, and continued daily in a systematic way so long as the pupils respond well, will be found to go far toward producing distinct enunciation. Do energetic concert work. Have individuals follow with the same according to their needs. It should be impressed upon the pupils that distinct speech is a most valuable asset in social and business conversation as well as in reading. Such expressions as,

"Whatcha doin'?" (What are you doing?)
"Wher'd yego?" (Where did you go?)
"Cancher come?" (Can't you come?)
"Don'tcher know?" (Don't you know?)

are constantly current on our streets and on our school playgrounds. We are likely to consider these the earmarks of illiteracy when we see them in printed conversation. Why any more so there than in speech?

It is impossible to submit a *program* for a reading hour in these grades, or any other, that can be followed at all times. On some days articulation demands more time than on others; sometimes the drill on expression must take precedence; and again the assignment of the following day's lesson may take up very nearly, if not all, the period. The last is particularly true if the pupils have reached the place where they need the stimuli of new difficulties in expression or material. Above all else the teacher should have a definite line of development planned for the class, a distinct goal to be reached at a certain time, and that goal should mark the acquirement of certain things in expression, articulation, poise, and study habits, rather than the covering of so many lessons in so many days.

However, it is necessary to have a plan of action for each recitation and follow it as a rule, varying only when necessity demands. In a half-hour reading recitation the following division of time has been found successful:

Articulation.....Three minutes.
Oral Reading.....Twenty-two minutes.
Assignment.....Five minutes.

The suggestions previously given in detail for expression and articulation can be applied under this program. The question of assignment, however, has not been discussed and it is on this part of the hour that the success of the other divisions depends. So far as the material will permit the teacher should make her assignment include the points below:

I. List of Words.
   A. New.
      1. Pronunciation.
      2. Meaning.
   B. Old words in new sense.
II. Questions on Thought and Expression.

Hawthorne's *Golden Fleece* has been selected for an example of assignment; the work on this should cover a week, as the interest aroused is worth the time.

Assignment of "The Golden Fleece."

In what part of your dictionary can you find the following words? Jason, Iolchos, Centaurs, Cheron, Aesop, Pelias, Dodona, Argus, Colchis, Aetes, Medea, Cadmus, Neptune, Argonauts, Circe, and Vulcan? If you cannot find them in your small book where can they be found in the larger one? Look them up, mark them, and bring in some definite information concerning them. Pronounce and mark the following from your own dictionary: malice, garb, turbulent, quest, obeisance, suspended, meed.

Questions: Is this a fairy story, or a fable? Look up the word *legend,* before making your decision. What things are told about Jason in the early part of the story which help to form your decision? Why is the story called *The Golden Fleece?* Why is Jason made to cross the turbulent stream? Why were the people so excited over the appearance of Jason? How is King Pelias shown by his own speeches to be a wicked man? By what Hawthorne says about him? Select five words that seem best in describing the oak. Can you see the ship pulled by fifty youths in the southern seas? What does it look like? Can you picture to yourself the scene with King Pelias, Medea, and Jason? What does the room look like? How can you tell how Jason's, the King's, and Medea's speeches should be read? Where, in the encounter with the brazen bulls, should you read rapidly? Do you blame Medea for working against her father? Why is the oak forest where the fleece hangs made so dark? What are the best words used in describing the fleece and the dragon? Is this the last time Medea sees Jason? Does Jason get his throne? What places in the story should be read as if you were frightened? Find paragraphs that can be made clearer to the class by reading parts in a lower tone than the rest? How do you know that Jason is brave? That he is honest? Is he any greater in his character at the close of the story than at the beginning? Why?

No place has been given on the division of time in the recitation program for *Sight Reading,* for it is not always well to destroy the unity of the period by introducing a lesson foreign to the thought of the one prepared. Very often, however, sight reading can be introduced to strengthen the work in expression, for variety, to stimulate new interest, and to supplement material which the pupils have been unable to find. The last can be illustrated in connection with *The Golden Fleece,* where others of Hawthorne's stories which take up Jason can be used.

Sight reading is the best test in articulation that can be given. Have a paragraph read by a pupil and then call on different members of the class for the substance of it. They will see for themselves how difficult it is to know what is being read by one whose enunciation is poor. Another good device in sight reading is to pass the book from pupil to pupil, each reading but a sentence. Still another is to divide the class into groups, and give each a story to read aloud to the members of his group.

All the formality of school can be put aside at this time, and the pupils can be gathered in different parts of the room, so that the reading of each group will not annoy the others. With care and tact the teacher can make this very profitable, both in sight reading and in the development of the self-reliance of the school. By passing gently and continuously from group to group the teacher can keep sufficient supervision to maintain quiet and interest and still appear to be leaving the pupils to their own government.

Course of Reading for Third, Fourth, and Fifth Years.

THIRD YEAR.

Third Reader.
Stories of Great Americans for Little Americans (Eggleston).
Selections from *Grimm's Fairy Tales* (I. and II.).
Stories from *Garden and Field* (I. and II.).
Hawthorne's *Golden Touch.*
Stories of Old Greece.
Puss in Boots.
Child Life in Many Lands.

FOURTH YEAR.

Third Reader.
Story of Washington.
Story of Lincoln.
Story of Pioneer Life.
Aunt Martha's Corner Cupboard.
Alice in Wonderland.

FIFTH YEAR.

Fourth Reader.
Stories of American Life and Adventure (Eggleston).
Stories from Hawthorne's *Wonder Books.*
Black Beauty (Sewell).
Little Lame Prince (Mulock).
Rab and His Friends.
Heroes of Industry.

Reading of the Grammar Grades.

Almost the entire nature of the work done in these grades depends upon the amount of thorough preparation in articulation, expression, and habits of study in the earlier years. If the foundation work has been all that it should be, the advance course in the grammar schools should be a pleasure to both teacher and pupils: if that foundation has been neglected, there is nothing to do but to go back to the beginning and give what has not been given before. Fortunately the added age which comes with these school years makes it possible for the pupils to grasp the necessity of the work and to become ready to apply it in a shorter time than younger pupils can. On the other hand, these added years have brought added self-consciousness which makes the question of expression a difficult one, especially so with the half-grown, awkward boy. Arouse a vigorous interest among the better pupils, watch your chance, and when the rough, uncouth boy is off his guard in a moment of interest, sweep him into line by having him read a minor part in some simple dramatization: pay no attention to him, but take it as a matter of course that he can and will do the part assigned. And he will. See that he has a longer part to read very soon. Continue this work until the time seems ripe for him to read alone. Nothing but infinite tact, a tact that ignores anything unusual in the boy's attitude, can overcome the difficulty this boy has in reading. But it can be done and the self-respect, the character development that comes to him in the process, is an ideal worthy to keep in mind.

Constant drilling on articulation is necessary through these grades, connecting the work here with outside practical life as much as possible. The use of the dictionary, of course, must continue now and always, as a life habit. In these grades more responsibility can be placed on the pupil in the selection of the words to be looked up. A committee can be appointed from the class, now and then, to

make the lists of words for the remainder of the class to look up. Individual lists can also be required and afterward discussed in class.

If the course of study supplies nothing but the school readers, the question of interest in these years will be greater than if suitable classics were included. Much can be done, however, toward study growth, if the material in the readers is classified by the teacher. This classification falls, ordinarily, into the following four groups:

First. The easy lessons which are within the grasp of the pupil when he first enters the grade and which appeal to him because of his ability to handle them.

Second. The selections which are taken from the best writers and contain thoughts of which the growing boy and girl are just beginning to be conscious as being true in life's philosophy. Connect this philosophy with present-day life, with public events and joys and sorrows of neighborhood associations. These are the lessons the pupils will choose again and again because of the universal appeal to human nature.

Third. The group which has interesting and new information. Here outside material can be brought to the class by the pupil and read by him to the class, or passed around to be used as sight reading.

Fourth. The lessons which contain material too difficult in thought and wording for the class. This group does not always exist, and the number of lessons in it, under any circumstances, can be greatly reduced by working the pupils up to it through the other groups in the reader. However, it is wiser to abandon the most difficult than to mystify the pupils by difficulties beyond their comprehension.

A great many of our boys and girls drop out before entering the high school. If for no other reason than this, the reading of classics should be encouraged in the grammar grades. They are most valuable for the development of good reading as the pupil loses himself in the interest of the story, or the sustained emotion of some great speech finally gains its hold on him and his expression comes much more naturally than in the short selections in the reader. It is well to begin with prose stories in this work and follow them with narrative poems, closing the work with, at least, one drama, *Julius Caesar* preferably, as the line of interest is a single one and easily followed. The assignment for the study of the narratives can be based on that of *The Golden Fleece,* given under the work in Intermediate Grades, only increasing the demands for expressive words and study of character. The more formal terms of *introduction, setting, climax, character development,* etc., can gradually be introduced and with bright pupils in the upper grades it is possible to take up the question of an author's style in a simple way. Familiarity with these terms makes it desirable to handle the study of *Julius Caesar* in a far more scholarly fashion than would be possible otherwise. In connection with the drama, it is wise to teach the general structure of Shakespeare's plays as the pupil is saved much bewilderment if he understands what is to be accomplished in each act. He is also furnished a basis for future reading and study, which makes it possible for him to do much better work. The outline below is given as a general one to follow, but it should be varied slightly if the play demands:

I. Introduction: Act I.
   - A. Introduction of important characters.
   - B. Previous history necessary for understanding of plot.
   - C. Hero's purpose.

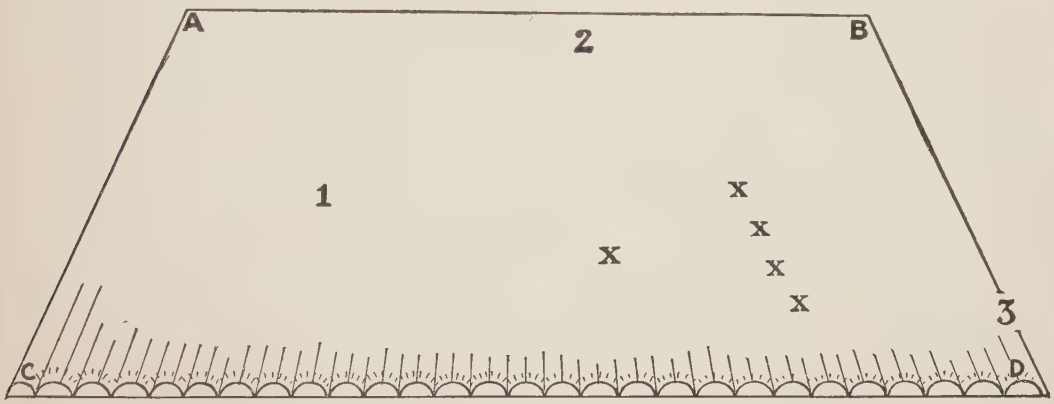
II. Development of hero's purpose: Act II.

III. Climax: Act III.

IV. Gradual undoing of opposition to heir: Act IV.

V. Catastrophe or happy ending: Act V.

The play should be studied carefully with questions as well as by following this outline. The reading hour should be given up to the discussion of these until the pupils are thoroughly familiar with the thought of the times. Then should follow a dramatization of the entire play. By no means have the pupils learn their parts. It is reading we are teaching, not public speaking. The important element is the drill they get in handling their book easily, in being able to look from it to the person addressed and back again without stumbling. In going through such simple acting as is in good taste with their part and their possibilities and still keeping their place in reading, these are the essentials which give the value to this work. Assign the parts the day before and give such directions about the position of the different characters as may seem best, including the acting necessary for the interpretation. The front of the schoolroom is the stage,



STAGE PLAN FOR DRAMATIZATION OF TIPPING JOHN SILVER THE BLACK SPOT.

A-B, Front wall of room or back of stage; C-D, Front of stage, bounded by front row of seats; 1, John Silver; 2, Jim; 3, Exit and entrance of Mutineers; X X X X, Mutineers; X, Mutineer that gave the black spot.

the exits and entrances are from the side, the school is the audience. After the first act is read, plans for the stage can be asked for from the pupils. It will be a surprise to find how much interest and ingenuity the pupils will show in this work and what a growth will be made in imitation, in resourcefulness, and in expressional reading.

Suggestive Course of Reading for Grammar Grades.

Sixth Year.

Fourth Reader.
Robinson Crusoe.
Hiawatha.
Rip Van Winkle.
King Arthur and His Knights.
Great Stone Face.
Courtship of Miles Standish.

Seventh Year.

Fifth Reader.
Lamb's *Tales from Shakespeare.*
Lowell's *Vision of Sir Launfal.*
Man Without a Country.
Treasure Island.

Eighth Year.

Fifth Reader.
Evangeline.
Lady of Lake.
Snowbound.
Julius Caesar.
Succession of Forest Trees (Thoreau).

Reading in the High School.

Reading as a special course in the high school does not exist, but the drill in it should by no means be discontinued because of that. The English courses offer abundance of opportunity for reading. If the grade work has been properly done the study of literature in the high school has received an impetus which the instructors recognize to be of the highest value. Not all of every classic, taken up in the study of English, can be read aloud by the class in the recitation period, but selections can and should be read with particular attention given to the expression of them. Dramatization, here as in the grades, is one of the best devices for bringing awkward pupils before the class and making them forget their embarrassment. Numerous passages in narrative poems and in prose fiction can be simply dramatized, and much benefit in thought interpretation can be derived from the work as well as the drill in reading. Some of these are *The Inn Scene,* in Silas Marner; *Tipping John Silver the Black Spot,* in Treasure Island; *Trial of Rebecca,* in Ivanhoe; *Quarrel between Roderick and Malcolm Graeme,* in Lady of the Lake.

Teacher's Reference Table of Terms Used in Reading.

I. Quality.
- A. Definition.
  - 1. Quality has reference to the kind of tone to be used.
- B. Kinds.
  - 1. Pure.
    - a. A tone free from harsh, nasal, or aspirate qualities.
  - 2. Orotund.
    - a. Definition.
      - 1. Full, clear tone used in solemn, energetic, or pathetic expression.
    - b. Degrees of this tone according to emotion.
      - 1. Effusive.
        - a. Solemnity or pathos.
      - 2. Expulsive.
        - a. Earnestness.
      - 3. Explosive.
        - a. Intense excitement.
  - 3. Aspirated quality.
    - a. A tone made by an excessive expulsion of breath in uttering sounds of intense fear.
  - 4. Güttural quality.
    - a. This tone is caused by an imperfect opening of the mouth and nasal passages; it is never used except in imitation in interpretative reading.

II. Force.
- A. Definition.
  - 1. Force is that term in reading which designates the loudness and intensity of the utterance.
- B. Kinds.
  - 1. Subdued.
    - a. Use.
      - 1. In expression of pathos and solemnity.
  - 2. Moderate.
    - a. Use.
      - 1. In expression of descriptive, or didactic composition.

3. Energetic.
    a. Use.
        1. In all lively composition.
4. Impassioned.
    a. Use.
        1. In expression of intense emotions.

III. Stress.

A. Definition.
    1. The manner in which force is applied.
B. Kinds.
    1. Radical.
        a. Force of the utterance falls on the first part of the sound and vanishes more or less rapidly.
    2. Medium.
        a. Force is so applied that the utterance swells out in the middle of the tone.
    3. Vanishing.
        a. Force is withheld until the close of the sound and then comes out sharply.
    4. Compound.
        a. The voice touches forcibly on the first and last parts of the sounds, but passes lightly over the middle.
    5. Intermittent.
        a. A trembling sound, or a number of short impulses resembling a wave.

IV. Pitch.

A. Definition.
    1. The degree to which the voice is lowered or raised.
B. Kinds.
    1. Low.
    2. Very low.
    3. Middle.
    4. High.
    5. Very high.
    6. Transitious.

V. Time.

A. Quantity.
    1. The length of time occupied in uttering a syllable or word.
B. Movement.
    1. A term closely connected with quantity, but including in its meaning stops and pauses.

Reading in Literature.

Whence is thy learning? Hath thy toil
O'er books consumed the midnight oil?

—*Gay.*

All rests with those who read. A work or thought
Is what each makes it to himself, and may
Be full of great dark meanings, like the sea,
With shoals of life rushing.

—*Bailey.*

That place that does contain
My books, the best companions, is to me
A glorious court, where hourly I converse
With the old sages and philosophers;
And sometimes, for variety, I confer
With kings and emperors, and weigh their counsels.

—*Beaumont and Fletcher.*

ARITHMETIC

Introduction.

EVERY lesson in numbers should have value, not only as an arithmetic lesson, but as a language lesson. Each lesson should develop ideas and words with which to help express those ideas. Frequently we hear advanced students as well as school children say, "I know but cannot tell it." This proves the lack of power to express. Ideas should be clear and then definitely expressed.

The Abstract and Concrete.

Every class has its bright as well as its sluggish mentalities. In presenting numbers to children, the idea of the mental development of the mind should be paramount. The methods used to interest the extremely slow pupils may not be the most wholesome for the brighter minds. Care, therefore, should be taken that the object method is not carried to such an extent that it has a tendency to dwarf the brighter intellects.

The earlier the child can grasp the thought of abstract numbers, the better. In case the teacher realizes that the abstract has not aroused the understanding, then the objective method should be resorted to. It is better that the dullard be left dull than that the bright mind be stupified or hindered in its growth. The slow pupil is not the teacher's only care and, perhaps, not the greatest.

The Child Mind.

No definite outline can be placed before any teacher that will be sufficient for all classes. Every class contains pupils with dispositions different from any other. No two faces were ever constructed exactly alike, and no two minds are exactly equal in power of concentration, or aptitude. That which arouses thought in one mind may fail to create a sensation in another. The child, therefore, is the teacher's problem. She should know her pupils fully as well as the subject to be taught.

Self-Effort is Paramount.

Children learn by doing is a pedagogical maxim, trite but true. The muscles of the body grow strong by usage. The same law governs mental growth. The child may learn a fact by hearing it stated. In this way he will get knowledge, but without some effort on the part of the learner the fact goes from him and no mental growth takes place. The mind becomes more powerful by its own activity. The awakening of self-effort in the pupil is true teaching.

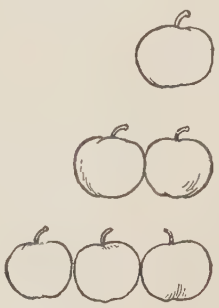
Practical experience on the part of the child arouses self-activity and understanding follows as a result. The boy or girl who spends a nickel out of his quarter realizes fully that he has 20 cents left. The children that play *keep store*

with mock or real money acquire ability to understand fundamental operations and their practical applications. A pupil may say there are 9 square feet in a square yard without any mental conception of the size or shape of a square yard. When he has drawn the square yard and divided it into square feet, he appreciates the meaning of *9 square feet make 1 square yard.*

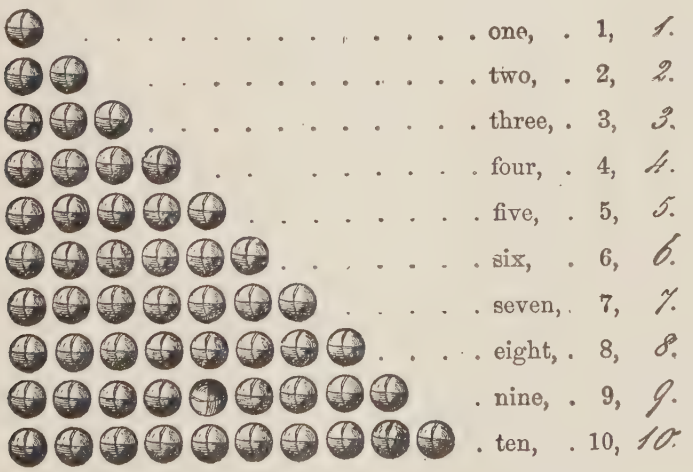
The Aim.

The object of teaching is not so much the placing of facts in the mind of the child as it is the preparing of the mind for the acquisition of knowledge, creating therein a taste for it, and developing the power to retain knowledge. Too much explaining on the part of the teacher weakens the mental capabilities of the child. Some problems must be explained by the teacher and this explanation should be followed by much drill, else the explanation is of little value. If the pupil studies out the problem for himself, very little drill is necessary.

Teaching of 1, 2, and 3.



Children, draw the picture of 1 apple.
1 = one. Make 1. Write the word one.
Clap your hands 1 time.
Hold up 1 finger; 1 hand.
Make pictures of 2 apples.
Clap your hands 2 times.
2 = two. Write the word two.
Hold up 2 fingers; 2 hands.
Draw 3 apples.
Clap your hands 3 times.
3 = three. Write the word three.
Hold up 3 fingers.
Make 3 straight marks.
Write the word one 3 times.



TEACHING OBJECTS AND NUMBERS FROM 1 TO 10.

Make the figure one 3 times.
Make 3 circles. Make 3 squares.
Write the word two 3 times.
Make the figure 2 three times.
Touch the desk with the right hand 3 times.

Touch the desk with the left hand 3 times.
Touch the desk with both hands 3 times.
Make the figure 3 three times.
Mary may draw 2 apples and John may draw one apple.
How many apples have both drawn?
How many more did Mary draw than John?
Draw 3 circles around each apple.
Children, stand on the left foot. Touch the floor with the toe of the right foot 3 times. With the heel 3 times.
Stand on the right foot. Touch the floor with the toe of the left foot 3 times With the heel 3 times.
Raise the right arm 3 times.
Raise the left arm 3 times.
Raise both arms 3 times.
Require pupils to tell something of their own experience, where 3 people or 3 objects were involved.
Some one tell a story of three robins.
Another tell of 3 children, another of 3 apples, and so continue the work until the pupils fully grasp the numerical value and can make applications of this value in their own language.

To Teach 4 and 5.

Children, draw a picture of 4 apples.
Draw 4 squares. Make 4 circles.
Make 4 straight lines.
4 = four. Write the word four. Count the letters in the word four.
Draw 4 pumpkins.

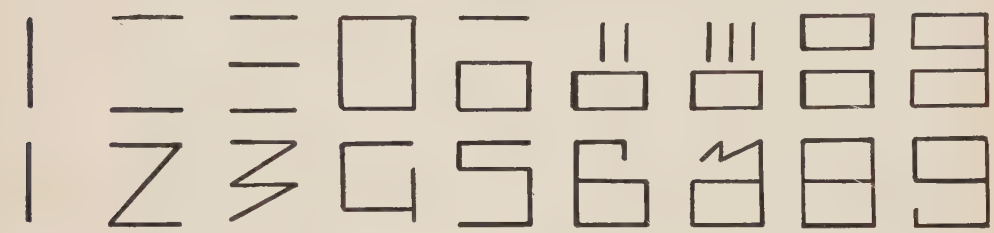
Tell a story of 4 kittens.
Mary, tell about having 4 apples and eating one. How many were left?
Tell about eating two apples.
Tell about eating three.
Children, draw a picture of 5 apples.
Make 5 squares; 5 circles.
Make 5 straight marks.
5 = five. Write the word five 5 times.
Can five children play *Pussy Wants a Corner?* Tell how it is done.
Tell a story about having 5 cents and spending 2 cents. About spending 1 cent. About spending 3 cents. About spending 4 cents. About spending 5 cents.

A Lesson to Illustrate 5, 6, and 7.

Draw 5 apples, 5 squares, 6 circles. Make 6 dots. Make 6 straight lines.
Make 5 long lines and 1 short one. How many more long lines have you than short ones?
How many are 3 geese and 3 geese? Draw 6 geese.

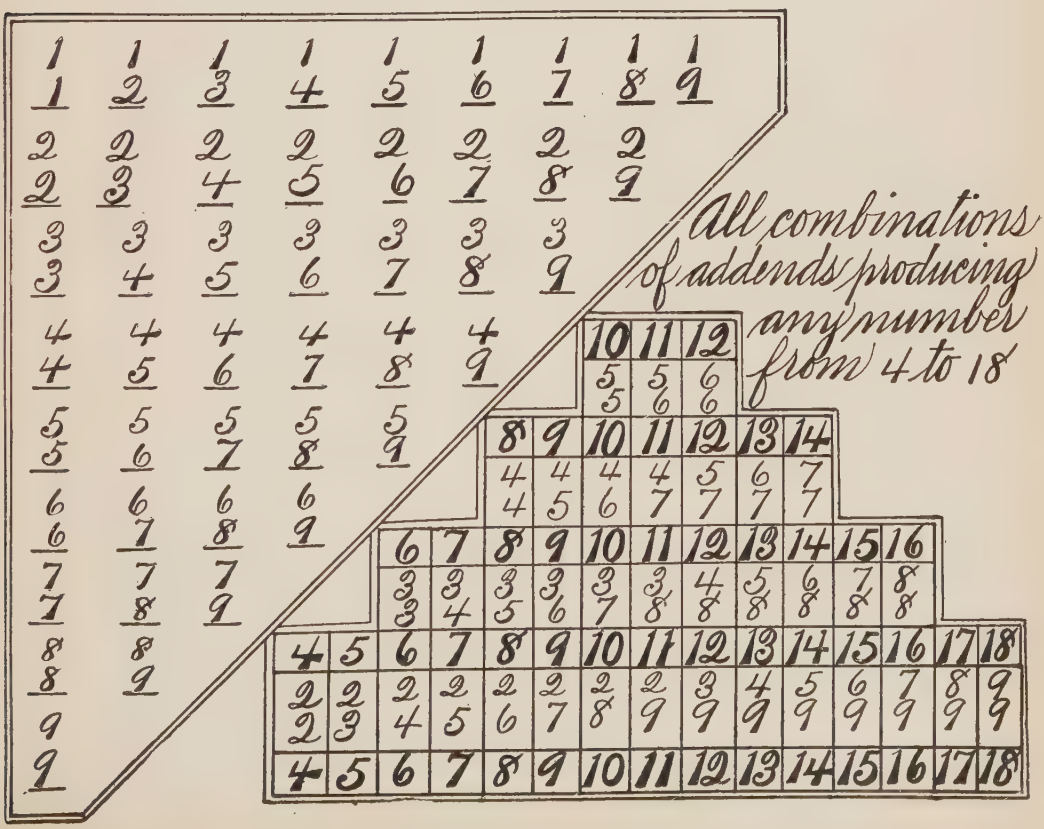
Can 6 children play *Pussy Wants a Corner?* Can they play together in the same room? Tell how.
Can 2 boys play with 6 marbles? Tell how.
If you had 6 cents and bought a two-cent stamp, how many cents would you have left?

Evolution of Figures



1 2 3 4 5 6 7 8 9

The Forty-five Combinations of Numbers



Can 6 boys play baseball? Tell why not.

Draw a nest with 1 egg in it and one with 7 eggs in it. How many are 6 eggs and 1 egg?

If you take 1 egg out of each nest, how many eggs will there be in both nests? How many are 3 eggs and 4 eggs?

NOTE: These exercises can be continued with all numbers. All numerical values and combinations should be illustrated by stories related by the child and in the child's own language.

Review Object Lesson.

How many cherries on the end of the branch?
How many in the first cluster?
How many in the first cluster and on the end of the branch?
How many cherries in the second cluster?
How many in the first and second clusters?
How many in the first and second clusters and on the end of the branch?
How many more in the second cluster than in the first cluster?
How many more in the second cluster than on the end of the branch?
How many cherries in the third cluster?
How many in the third and second clusters?
How many in the third and first clusters?
How many in the third cluster and the end of the branch?
How many in the first, second and third clusters?
How many cherries on the branch?
How many more in the third cluster than in the second cluster?
How many more in the third cluster than in the first?
How many more in the third than on the end of branch?

Children, what kind of birds do you think these are? Why?

How many cherries has each bird taken? From what place on the branch do you think the bird with the two took them?

From what place do you think the other bird took the cherry? Why?

How many cherries have both birds?

Which bird has the more?
How many more has one bird than the other one?
Children, did you ever see birds taking cherries from a tree?
Did you ever know people to shoot birds for taking cherries?
What do you think should be done to keep the birds from taking cherries?

Dominoes.

Children enjoy play work with dominoes, as it combines business with pleasure, and they learn to think as they play. The real dominoes are too noisy for the average child to handle in school. Each pupil will enjoy making a set for himself from pasteboard or some heavy paper. It affords children pleasant and profitable busy work.

Combinations With Dominoes.

Point to the domino in the table which has no dots. The number of dots on this domino equals 0. 0 = *zero* or *naught.*

Zero means nothing.

Draw the picture of this domino.

Call this double-blank.

Find the domino called blank-one. How many dots has it?

Find the domino called double-one.

Count the dots. 2 = two.

Draw the picture of this domino.

How many more dots on double-one than on double-blank?

Find another domino containing the same number of dots as double-one.

Call it blank-two.

Draw the picture of blank-two.

The number of dots in blank-two is how many times the number of dots in double-two? How many dots in double-two and blank-two?

2 and 2 equal 4. 4 = four.

Find a double containing as many dots as both double-one and blank-two.

What should this be called? Ans.—Double-two.

Draw a picture of double-two.

Find another domino containing the same number of dots as double-two and having one side blank.

What shall this be called? Ans.—Blank-four.

Draw a picture of blank-four.

Find another domino containing the same number of dots as double-two and having one dot on one side.

What shall we call this domino? Ans.—Three-one.

Draw a picture of three-one.

How many dots on the left side of three-one?

How many dots on the right side of three-one?

How many more dots on the left side of three-one than on the right side?

Find a domino containing only one dot.

What shall we call this domino? Ans.—Blank-one.

Draw a picture of blank-one.

How many dots in double-blank and in blank-one? $1 + 0 = 1$.

How many more dots in blank-one than in double-blank? $1 - 0 = 1$.

How many dots in double-one and in blank-one? $2 + 1 = 3$.

How many more dots in double-one than in blank-one? $2 - 1 = 1$.

How many dots in double-two and blank-one? $4 + 1 = 5$.

How many more dots in double-two than in blank-one? $4 - 1 = 3$.

Find a domino containing three dots and one side blank.

What shall we call this domino? Ans.—Blank-three.

Draw a picture of blank-three.

Find another domino containing the same number of dots as blank-three.

What shall we call this domino? Ans.—Two-one.

Draw a picture of two-one.

How many dots in blank three and in two-one? $3 + 3 = 6$.

How many more dots in blank-three than in two-one? $3 - 3 = 0$.

☞An endless number of combinations can be made with dominoes, only a few of which can be given here.

Fractions With Dominoes

Place double-three on the table.
Find another double containing ⅔ as many dots as double-three.
Four equals what part of six?
Four is ⅔ of what number?
Find a double containing 1⅓ times as many dots as double-three.

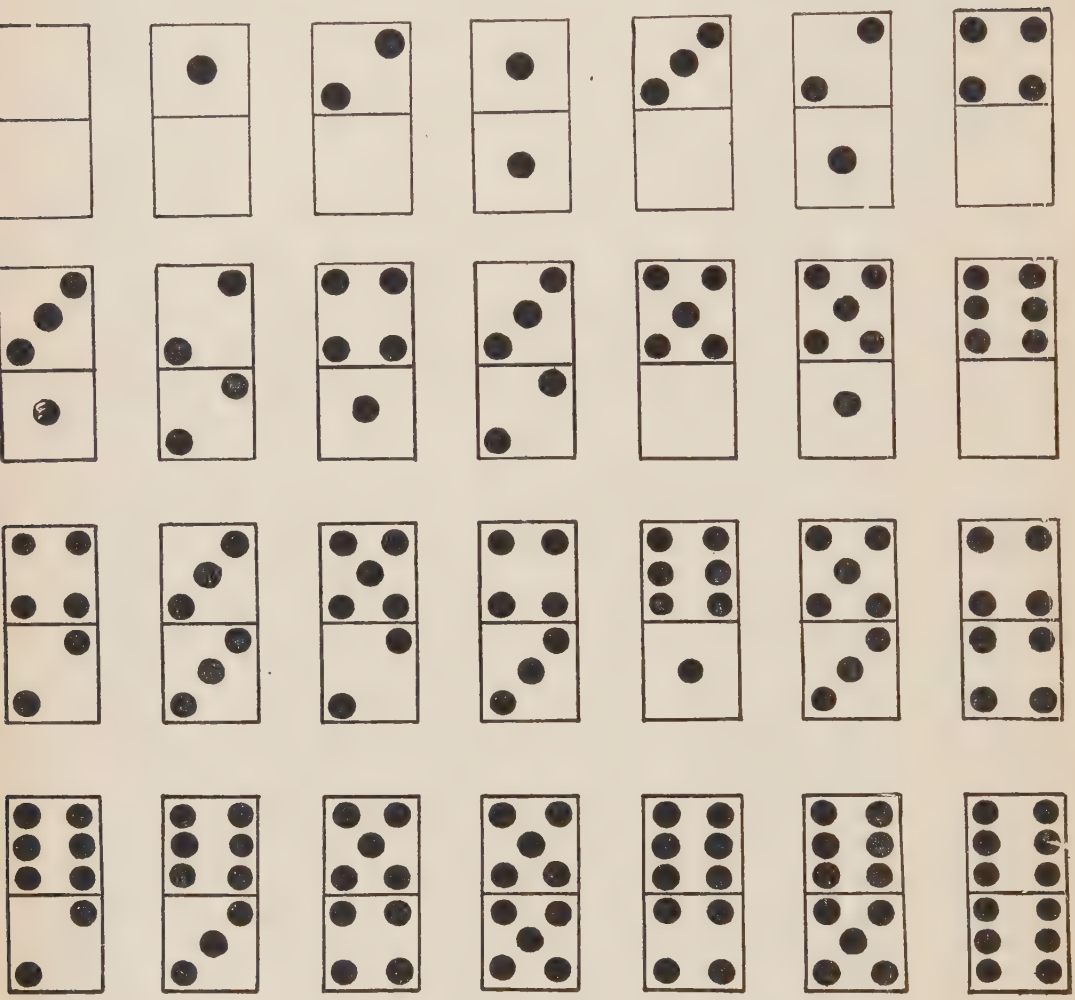


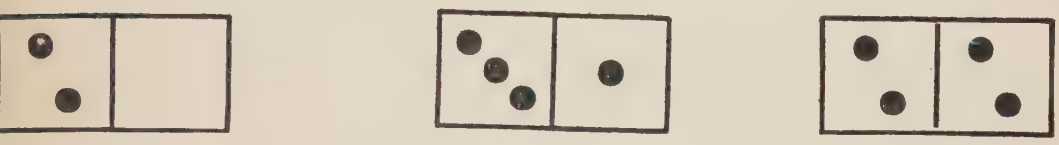
TABLE OF DOMINOES.

Six is what part of eight?
Six is ¾ of what number?
Eight is 1⅓ times what number?
Four is what part of eight?
Find a double containing 1¼ times as many dots as double-four.
Four is what part of five? Eight is what part of ten? Four is ⅘ of what number? Eight is ⅘ of what number?
Five is what part of four? Ten is what part of eight?
Five is 1¼ times what number?
Ten is 1¼ times what number? Ten is ⅝ of what number?
Find a double containing 1¼ times as many dots as double-five.

Five is what part of six? Six is what part of five?
Ten is what part of twelve? Twelve is what part of ten?
Twelve is what part of eight? Eight is what part of twelve?
Six is what part of twelve? Twelve is how many times six?
Four is what part of twelve? Twelve is how many times four?
Find a domino not a double containing ⅔ as many dots as double-six.
Find a domino not a double containing ⅓ as many dots as double-six; one, not a double, containing ½ as many as double-six; one, not a double, containing ¾ as many dots as double-six.
Find another with the same number of dots as five-four.

Percentage With Dominoes.

Find a domino which contains 50% as many dots as the other.



The number of dots on blank-two is what per cent. of the number on three-one and the number on double-two?
Find dominoes containing 33⅓% as many dots as another.

The number of dots on blank-two is what per cent. of the number on blank-three? On double-three?
This work may continue with all per cents. and with various combinations. Ratio and proportion may also be introduced to children by means of dominoes.

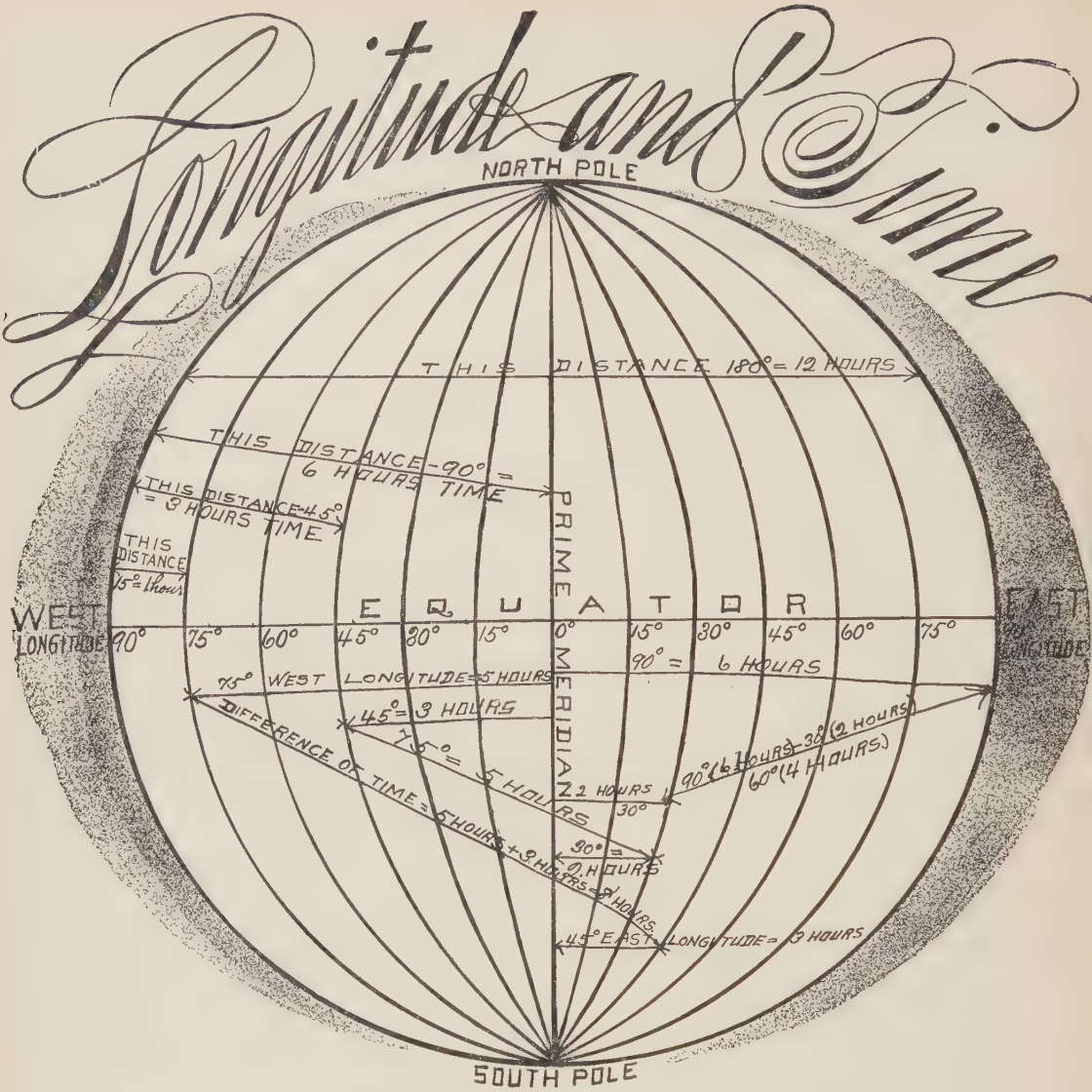
Applications of Percentage.

1. WITHOUT TIME.
   1. Profit and Loss.
   2. Commission.
   3. Stocks, Dividends, etc.
   4. Premiums and Discounts.
   5. Brokerage.
   6. Stock Investments.
   7. Taxes.
   8. Duties and Customs.

2. WITH TIME.
   1. Simple Interest.
   2. Partial Payments.
   3. True Discounts.
   4. Discounting and Banking
   5. Exchange.
   6. Compound Interest.
   7. Annuities.
   8. Insurance.

1. *Price* is the sale value in money.
2. The *wholesale* price is the price of merchandise in large quantities.
3. The *retail* price is the price of merchandise in small quantities.
4. Merchandise is bought and sold at *wholesale* and at *retail* prices.
5. *Discount* is an allowance or deduction from the amount owing or charged.
6. The purchase and sale of merchandise are known as *mercantile transactions.*

Longitude and Time


NORTH POLE
THIS DISTANCE 180° = 12 HOURS
THIS DISTANCE = 90° = 6 HOURS TIME
THIS DISTANCE = 45° = 3 HOURS TIME
THIS DISTANCE 15° = 1 hour
PRIME MERIDIAN
EQUATOR
WEST LONGITUDE
EAST LONGITUDE
90° 75° 60° 45° 30° 15° 0° 15° 30° 45° 60° 75° 90°
75° WEST LONGITUDE = 5 HOURS
90° = 6 HOURS
45° = 3 HOURS
15° = 1 HOUR
DIFFERENCE OF TIME = 5 HOURS + 3 HRS. = 8 HOURS
2 HOURS
30°
90° (6 HOURS) - 30° (2 HOURS)
60° (4 HOURS)
90° = 6 HOURS
45° EAST LONGITUDE = 3 HOURS
SOUTH POLE

A point on any plane can be located by two measures taken from two intersecting lines.

On a map, the lines from which measurements are made are the *equator* and the *prime meridian.*

The distance a point is from these lines is not expressed in units of length, such as rods and miles, but in degrees, minutes, and seconds.

Longitude is distance east or west of the prime meridian.

Relation of Longitude to Time.

Since the earth turns on its axis once in every 24 hours, every point on the earth's surface passes under the sun's rays every 24 hours. Consequently 360° of the earth's surface pass under the sun's rays in 24 hours. Therefore,

360° of longitude = 24 hours of time.
1° of longitude = 1/360th of 24 hrs. = 4 min.
1′ of longitude = 1/60th of 4 min. = 1/15th min. = 4 sec.
1″ of longitude = 1/60th of 4 sec. = 1/15th sec.

Consequently, the difference in longitude equals fifteen times the difference in time. The motion of the sun is only apparent.

When we are on the cars moving eastward, the objects on either side appear to be going west. We pass another train, which is standing still, and it appears to move in the opposite direction to the motion of the train on which we are riding.

The earth rotates on its axis from west to east. This motion of the earth causes the sun to appear to move from east to west.

EARLIER TIME WEST; LATER TIME EAST. Because 360° of the earth's surface pass under the sun's rays in 24 hours, the sun appears to pass over 15° of the earth in one hour. Consequently, when it is noon on any meridian, it will be one o'clock P. M. 15° east of that meridian and eleven o'clock A. M. 15° west of it.

Questions.

When it is noon in Chicago, what is the time 15° east of Chicago? 15° west of Chicago? 30° east of Chicago? 30° west of Chicago? 90° east of Chicago? 90° west of Chicago?

What direction would you go from here to find later time? To find earlier time? When it is noon here, in what direction and how many degrees from here is it 3 o'clock P. M.? 10 o'clock P. M.?

In traveling east does one's watch become too fast or too slow?

A man travels until his watch is one hour too fast; which way did he travel and how many degrees? After sunrise in Montreal darkness continues for more than two hours in Vancouver. Tell why.

BELONGS TO GEOGRAPHY. The subject of longitude and time properly belongs to geography and should be taught, or at least correlated, in geography lessons.

Most countries have their own prime meridian. The prime meridian for the United States passes through Washington. That of England passes through Greenwich. That of France passes through Paris.

In reckoning time in Canada and the United States, longitude is usually measured from the meridian of Greenwich.

Twelve and Growth From It.

Twelve things make a dozen.

How many of you ever counted a dozen eggs? 12 = twelve = a dozen.

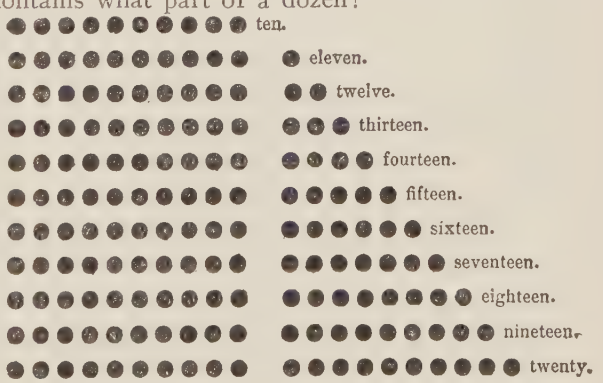
Make a dozen marks. Make a dozen circles. Make a dozen squares. Place a dozen pegs on your desk. Put the pegs in two piles, placing as many pegs in one pile as in the other pile. How many pegs in each pile? Each pile contains how many pegs? Each pile contains what part of a dozen?

6 = six = a half dozen.

How many eggs in a half dozen? Make a half dozen marks. Make a half dozen circles. Put a half dozen rings around a circle.

William is a dozen years old. He has a sister half as old. Tell a short story about the age of his sister.

William has a cent for every year he is old. How much money has he? Has he more or less than a dime? How much?



TEACHING OBJECTS AND NUMBERS FROM 10 TO 20.

The sister has a cent for every year she is old. How many cents has she? Has she more or less than a nickel? How much?

Has she more or less than a dime? How much?

Has William more or less than a nickel? How much?

Has William more or less than two nickels? How much?

Has William more or less than three nickels? How much?

How many sticks of candy can the sister buy, if each stick is worth one cent?

If apples cost two cents each, how many apples can the sister buy?

If pears are three cents each, how many pears can the sister buy?

If candy is one cent a stick, how many sticks can William buy?

The number of sticks that the sister can buy, is what part of the number William can buy?

If apples cost two cents each, how many apples can William buy?

The number of apples William can buy is how many times the number the sister can buy?

Draw the number of apples the sister can buy.

Draw the number of apples William can buy.

The number of apples the sister can buy is what part of the number that William can buy? ½ = one-half.

If pears cost three cents apiece, how many pears can William buy? How many can the sister buy?

The number William can buy is how many times the number the sister can buy?

The number the sister can buy is what part of the number William can buy?

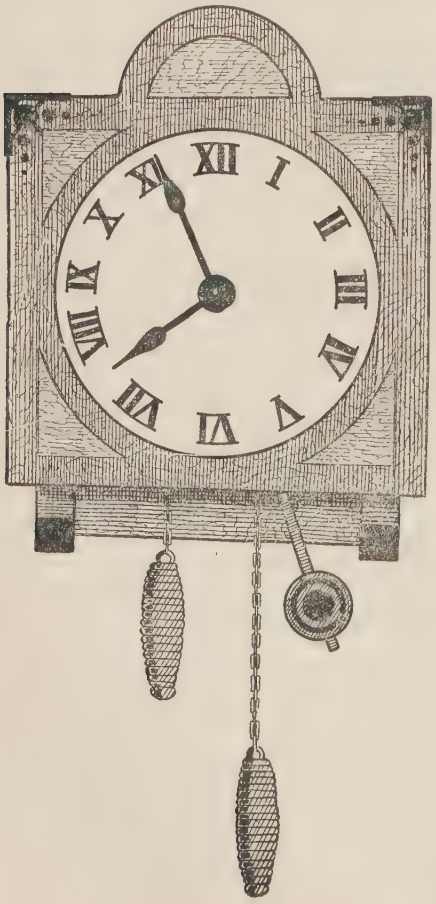
Draw the number of pears that the sister can buy.

Draw the number of pears William can buy.

Four are how many times two?

Two is what part of four? 2 = — of 4. 4 = — times 2.

Six are how many times three? Three is what part of six? 3 = — of 6. 6 = — times 3.



Teaching Regularity in Counting.

Does this clock tick? Why not? Listen to the clock on the wall. Does it tick? (Teacher indicating when to begin.) Count silently three ticks of the clock, raising the hand on count three. Count silently four ticks of the clock, raising the hand on four. Continue this exercise to ten counts, and repeat until the children get the idea of regularity in counting.

Touch fingers to desk at clock ticks. First touch with right hand, then with left hand, and then with both hands.

Touch fingers to desk, giving one touch to two ticks of the clock.

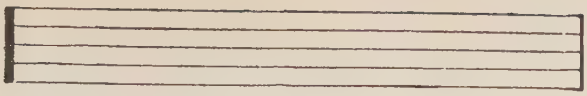
Touch fingers to desk, giving one touch to three ticks of the clock.

Touch fingers to desk, giving one touch to four ticks of the clock.

Repeat the exercise until mastered

Touch the desk two times to one tick of the clock.

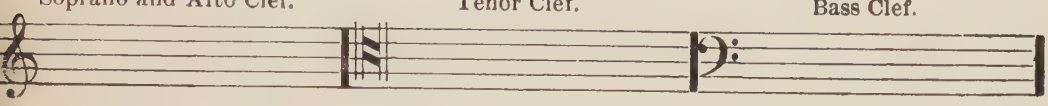
This is a Staff.



How many lines in a staff?
Between the lines are spaces.
How many spaces in the staff?
How many more lines than spaces does a staff contain?

The figures **and** **are called** ***Clefs,***

Soprano and Alto Clef. **Tenor Clef.** **Bass Clef.**



The Musical Scale.

1 2 3 4 5 6 7 7 6 5 4 3 2 1
Do Re Mi Fa Sol La Ti Si La Sol Fa Mi Re Do

Sing the scale up and down. Sing do, mi, sol, do.

Whole note.	**Half note.**	**Quarter note.**	**Eighth note.**	**Sixteenth note.**
Whole rest.	**Half rest.**	**Quarter rest.**	**Eighth rest.**	**Sixteenth rest.**

How many quarter notes do you see? How many half notes? How many whole notes? How many notes in all?

How many quarter notes and half notes do you see? How many quarter notes and whole notes? How many half notes and whole notes?

Touch the quarter note as the clock ticks, giving one count to each tick. Touch the half note two times, giving one touch to each tick. Count one, two, three, four.

Touch the whole note four times, giving one touch to a tick. Count one, two, three, four (the counting should first be aloud, then silently).

Sing syllables, do, do, re, re, mi, mi, do, keeping time as indicated above.

Introduction of Square Measure.

Draw a two-inch square. Draw a one-inch square. How many one-inch squares make a two-inch square?

A one-inch square is what part of a two-inch square? A two-inch square is how many times a one-inch square?

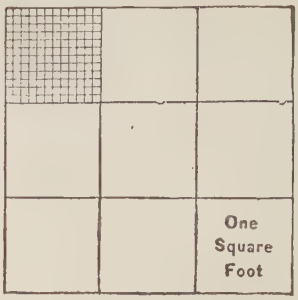
Cut both a one-inch and a two-inch square from paper. Cut the two-inch square into one-inch squares.

Find the distance around each square. The distance around the two-inch square is how many inches? The distance around the one-inch square is how many inches?

The distance around is called the *perimeter*. The perimeter of the two-inch square is how many inches more than the perimeter of the one-inch square?

This figure represents a square yard. It is 3 feet each way and contains 9 square feet. Each foot is 12 inches each way and contains 144 square inches.

From these facts it will be seen that the number of small squares in any large square is equal to the number of units in one side multiplied by itself.



Draw a three-inch square. Draw a two-inch square. Draw a one-inch square. Draw a half-inch square.

How many half-inch squares make a one-inch square? How many one-inch squares make a two-inch square? How many half-inch squares make a two-inch square?

How many one-inch squares make a three-inch square? How many half-inch squares make a three-inch square?

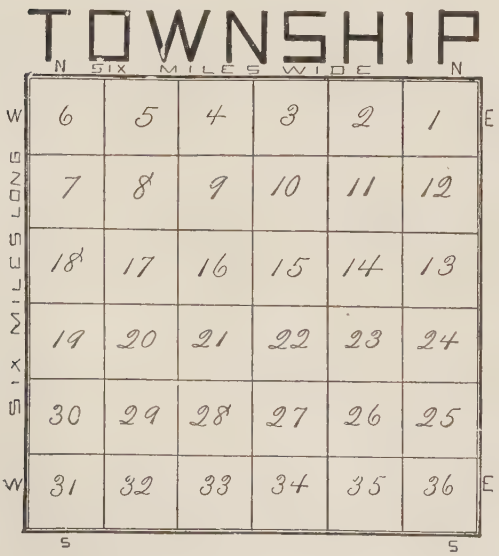
A one-inch square is how many times a half-inch square? A half-inch square is what part of a one-inch square?

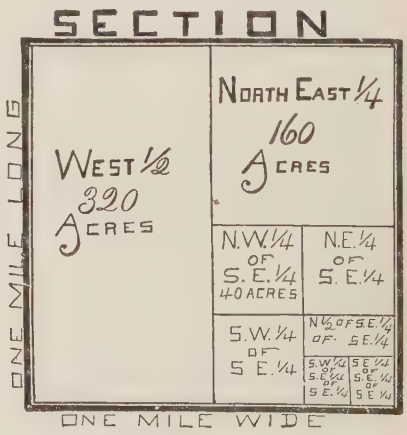
A two-inch square is how many times a half-inch square? A half-inch square is what part of a two-inch square?

A three-inch square is how many times a one-inch square? A one-inch square is what part of a three-inch square? A three-inch square is how many times a half-inch square? A half-inch square is what part of a three-inch square?

A three-inch square is how many times a two-inch square? A two-inch square is what part of a three-inch square?

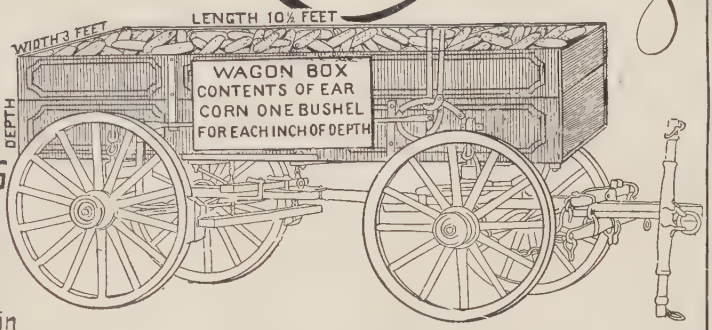
Cut paper to illustrate the solutions to the above problems.





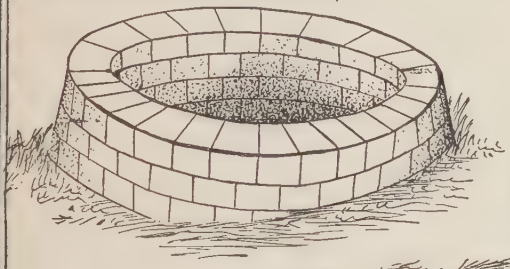
A township of land, as surveyed by the governments of Canada and the United States, is six miles square. It is divided into 36 equal parts, called sections, each section measuring one mile square and containing 640 acres. In Canada the sections are numbered just opposite to the above.

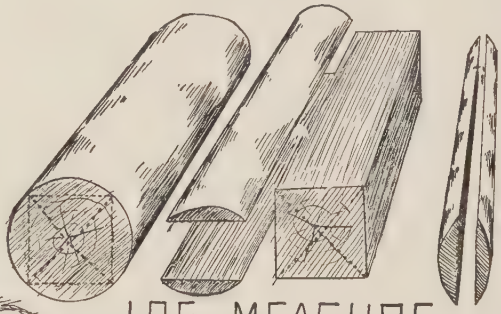
Barrel Measurements



MEASURING CISTERNS

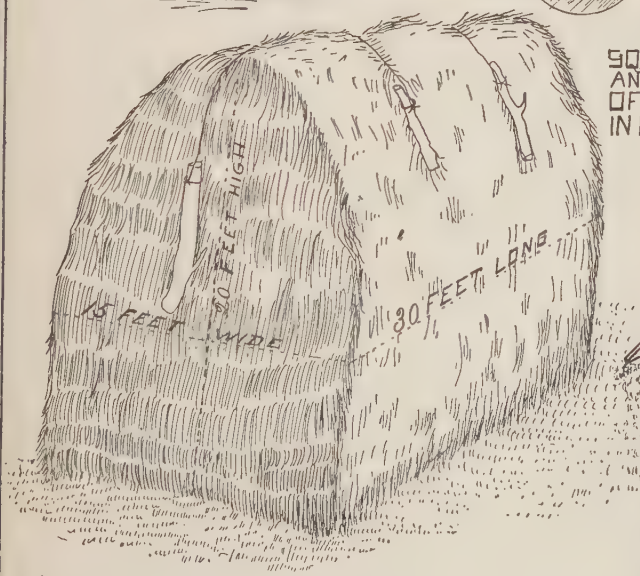
To find the contents of a cistern in barrels-multiply the square of the diameter in feet by the height in feet and divide the product by 4. For example a cistern 8 feet in diameter and 9 feet deep will contain $8^2 = 64$. $64 \times 9 = 576 \div 4 = 144$ barrels.





LOG MEASURE

SQUARE BOTH DIAMETERS IN INCHES AND TO THEIR SUM ADD THE PRODUCT OF THE DIAMETERS. MULTIPLY BY LENGTH IN FEET AND BY .0018



MEASURING HAY IN STACK

TO FIND THE NUMBER OF TONS IN A STACK-MULTIPLY THE WIDTH BY THE LENGTH (IN FEET) BY ½ OF THE HEIGHT AND DIVIDE BY 500. FOR EXAMPLE THE ABOVE STACK WILL CONTAIN $30 \times 15 \times 10 = 4500 \div 500 = 9$ TONS.

MEASURING EAR CORN IN THE CRIB

MULTIPLY THE NUMBER OF CUBIC FEET OF CORN BY .7 AND STRIKE OFF THE RIGHT HAND FIGURE AND YOU HAVE THE NUMBER OF BUSHELS.

Sections 16 and 36 were reserved as school lands and in settled districts were either leased or sold. Money obtained from leasing or selling of such lands became appropriated for educational purposes. Where grants of land were made for internal improvement, as to aid in building railroads, the grants were usually confined to the odd-numbered sections adjacent to the lines of railways.

Transfers of titles in land are made by the section or some fractional portion of a section, as shown in the illustration.

How many acres are there in a half section? In a quarter section?

Compute the value of a half section at $82.50 per acre.

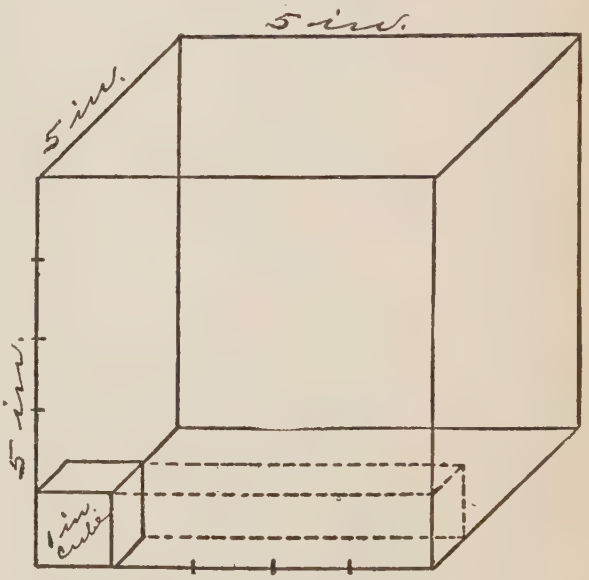
What is the value of the north half of the northeast quarter in section 20 at $63.75 per acre? At $91.40 per acre?

How many acres of land in 1/8 section? In three sections?

What is the difference in acreage between five sections and four sections?

Cubic Measure.

A cube is a solid figure in which all the edges, meeting in a corner, are at right angles to each other, and in which all the edges are equal. This will be seen in the illustration, which represents a cube whose edge is 5 inches. Its volume is found by taking for a unit of cubical measure a cube 1 inch on each edge. This unit, or cube, is laid along one edge as many times as possible, or 5 times, thus forming a row of 5 cubic inches. See the illustration and also page 369.



Five rows of 5 cubic inches may be formed at the bottom, giving a layer of 5×5 cubic inches. It requires 5 such layers to fill up the given cube, or $5 \times 5 \times 5$ cubic inches. This use of the third power of the number of inches on the edge gives the name "cube" of a number to the third power of the number. Since no solid figure exists with four edges at right angles, this process of naming the powers ceases with the third, or cube.

The figure 7^3 indicates that 7 is to be raised to the third power; thus, $7 \times 7 \times 7 = 343$.

The process of resolving a given number into three equal factors, or finding the length of one edge of a cube, is called *cube root.* A small figure combined with the radical sign ($\sqrt[3]{\ }$) indicates that the cube root is to be extracted. Thus, $\sqrt[3]{343} = 7$.

Find the cube root of 17,576.

Answer, $20 + 6 = 26$.

PROCESS.

$17'576 (20 + 6$

$8,000$

$3 \times 20^2 =$	1,200	9,576
$3 \times 20 \times 6 =$	360	
$6^2 =$	36	
	1,596	9,57

The cube of any number composed of tens and units contains four parts:

I. The cube of the tens.

II. Three times the product of the square of the tens by the units.

III. Three times the product of the tens by the square of the units.

IV. The cube of the units.

If the cube of any number be separated into periods of three figures each, beginning at the right, there will be as many periods as there are figures in the root, but the left-hand period may contain one, two, or three figures.

Common Fractions.

James has one apple. He wishes his little sister to share this apple with him so the sister will have just as much as he will. Tell how he can do this. Illustrate by dividing an apple or other fruit.

HALF.

HALF.

How can two boys share an apple so one boy will have as much as the other? Draw a picture of the apple. Divide it as you would the apple.

What part of the apple is each piece? $\frac{1}{2}$ = one-half.

How can three boys share a pie and each have as much as the others? Draw a picture of the pie. Divide it as you would divide the pie among three boys. Each piece is what part of the pie? $\frac{1}{3}$ = one-third.

Tell other stories illustrating one-half and one-third of something. Pupils should be encouraged to make their own stories about one-third of and one-half of something.

Henry has a nickel with which to buy oranges. He is told that the oranges are 20 cents a dozen. How many can he buy with the money he has?

Roy has a dime. How many oranges can Roy buy? The number of oranges he buys is how many times the number Henry buys? The number Henry buys is what part of the number Roy buys? $\frac{1}{2}$ = one-half.

Henry's money is what part of Roy's money?

If oranges are 30 cents a dozen, how many can Henry buy? How many can Roy buy? The number Henry can buy is what part of the number Roy can buy?

If oranges are 15 cents a dozen, how many can Henry buy? How many can Roy buy?

If oranges are 60 cents a dozen, how many can Henry buy? How many can Roy buy?

If oranges are 40 cents a dozen, how many can Roy buy? If oranges are ten cents a dozen, how many can each boy buy?

$= \frac{1}{2}$

$= \frac{2}{2}$

$= \frac{3}{3}$

$= \frac{2}{4}$

Make drawings like these.

Lessons to Illustrate ¼.

Three little girls came to see Mary. Her mother had made her a pie. Mary wished to cut her pie so each little girl and she might have equal parts of the pie. Tell how Mary would have to cut the pie.

Draw the picture of an apple and divide it as you think Mary divided her pie. What part of the pie would each child have? $\frac{1}{4}$ = one-fourth.

What are these the pictures of?

Are all the pieces equal?

What part of the whole is each piece?

Write a story suggested by the pictures.

Tell about each of the drawings.

Decimal Fractions.

Frank's father has a hundred-dollar bill. His mother has a ten-dollar bill. Frank has a one-dollar bill. His little brother, Donald, has a ten-cent piece, and his baby sister has a single cent.

Donald's money is how many times the baby sister's money? Frank's money is how many times Donald's money? The mother's money is how many times Frank's money? The father's money is how many times the mother's money?

Express in figures one hundred dollars, ten dollars, one dollar, ten cents, and one cent.

Ten cents equal one dime.

How much money have father, mother, and the three children? Write the number in both words and figures.

$\$100 + \$10 + \$1 + \$.10 + \$.01 = \$111.11$.

In the number 111.11 what does the left-hand 1 express? What does the right-hand 1 express? Tell what each figure expresses.

Which 1 stands for the greatest number of things? Which 1 stands for the least number of things? Each 1 is what part of the 1 at its left?

Tell what each 2 stands for in \$222.22. Write about each 2 in this number.

Tell what each figure stands for in \$333.33.

What does each figure name in 735.43?

Tell what each figure names in each of the following numbers:

742.83	75.87	6.45	4.4
645.01	30.26	9.63	8.3
741.81	20.18	8.00	9.1
227.31	30.05	6.66	7.6
200.02	20.07	4.01	5.2
607.04	90.06	2.02	1.5

One-tenth = .1. One-hundredth = .01.

Express in figures five hundred, three tens, two units, six tenths, five hundredths, two tens, two tenths, two hundredths, nine units, nine hundred, nine hundredths, four hundred, four hundredths.

Express in one number the following: Four hundred, five tens, three units, eight tenths, two hundredths.

A *Power* is the product of equal factors. 25 is the second power of 5. 4 is the second power of 2. 125 is the third power of 5.

What is the second power of 8, 6, 1, 4, 10? What is the third power of 3, 4, and 10?

A *Decimal Fraction,* or *Decimal,* is a fraction whose denominator is ten or some power of ten. A decimal is written at the right of a period (.) called the *Decimal Point.*

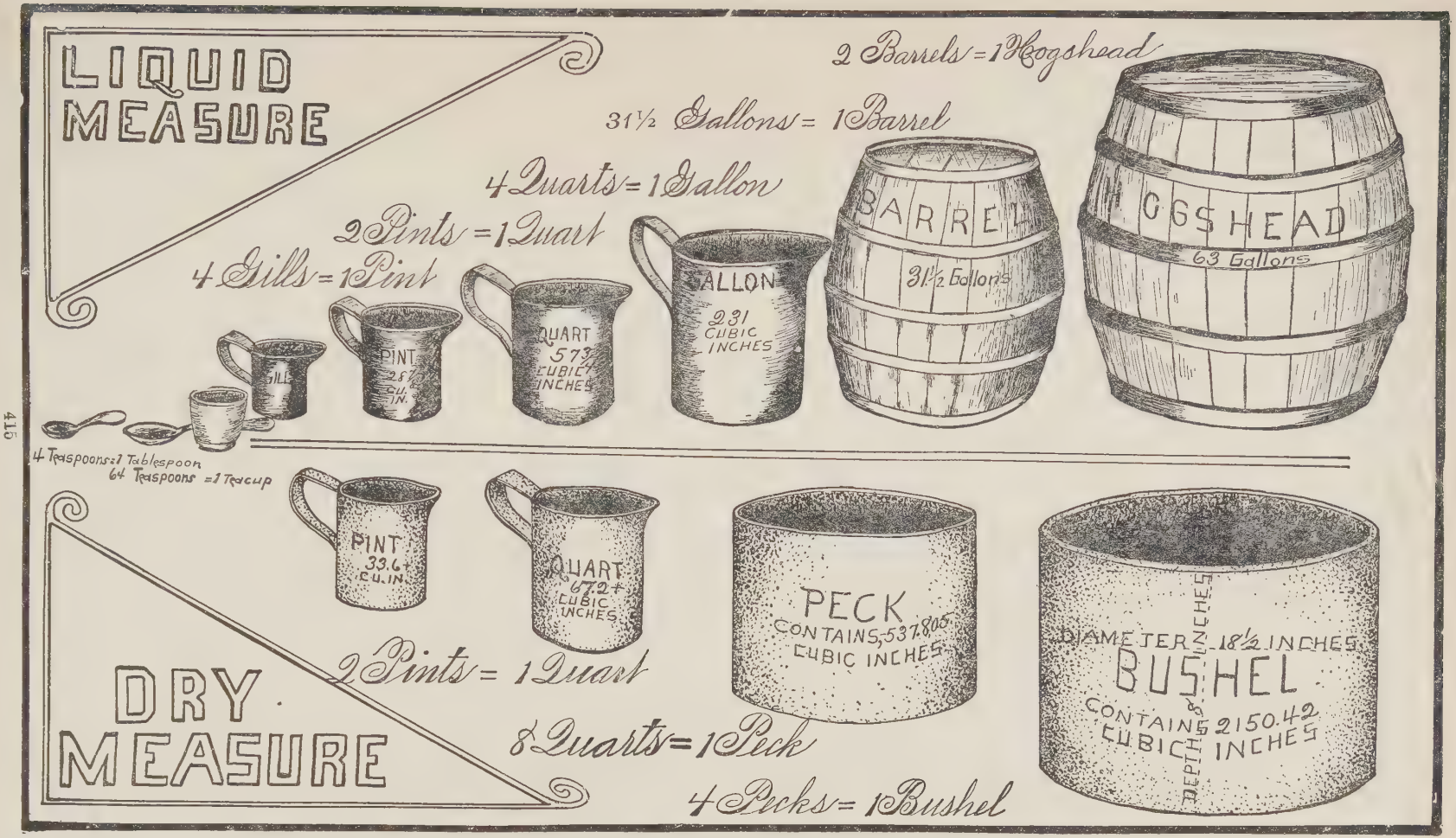
It is not necessary to write the denominator of a decimal. The denominator is shown by the position of the decimal point.

1/10 = .1	2/10 = .2	7/10 = .7	10/10 = 1.0
1/100 = .01	3/100 = .03	5/100 = .05	100/100 = 1.00
1/1000 = .001	42/1000 = .042	19/1000 = .019	1000/1000 = 1.000

Drill work for Division of Decimals.

5)$\underline{.005}$	50)$\underline{.005}$	.01)$\underline{.001}$	.001)$\underline{.01}$
3)$\underline{.006}$	.03)$\underline{.006}$	.02)$\underline{.0004}$	.02)$\underline{4}$
300)$\underline{.03}$	300)$\underline{.3}$	.05)$\underline{.05}$	.05)$\underline{50}$
.7)$\underline{700}$	70)$\underline{.07}$	.07)$\underline{700}$	.7)$\underline{.07}$

Long problems in division of decimals should be avoided until the student is sure of where to place the decimal point in the quotient.


LIQUID MEASURE
2 Barrels = 1 Hogshead
31½ Gallons = 1 Barrel
4 Quarts = 1 Gallon
2 Pints = 1 Quart
4 Gills = 1 Pint
BARREL
31½ Gallons
HOGSHEAD
63 Gallons
GALLON
231 CUBIC INCHES
QUART
57¾ CUBIC INCHES
PINT
28.7+ CU. IN.
GILL
4 Teaspoons = 1 Tablespoon
64 Teaspoons = 1 Teacup
PINT
33.6+ CU. IN.
QUART
67.2+ CUBIC INCHES
2 Pints = 1 Quart
DRY MEASURE
8 Quarts = 1 Peck
4 Pecks = 1 Bushel
PECK
CONTAINS 537.605 CUBIC INCHES
DIAMETER 18½ INCHES
BUSHEL
CONTAINS 2150.42 CUBIC INCHES
DEPTH 8 INCHES

Liquid Measure.

4 gills = 1 pint.
2 pints = 1 quart.
4 quarts = 1 gallon.
31½ gallons = 1 barrel.
2 barrels = 1 hogshead.
231 cubic inches = 1 gallon.

How many cubic inches in one quart? In one pint? In one gill?

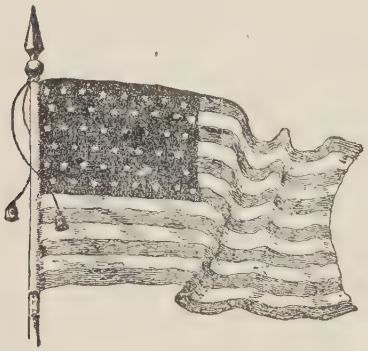
How many gallons in one hogshead?

Four gills make one pint. Put a gill of water in a pint cup. Can you drink a gill of water? Put two gills in a pint cup.

What part of a pint is one gill? What part of a pint are two gills?

Can you drink two gills of lemonade? Edward drank four pints of lemonade on Arbor Day. How many gills did he drink? How many pints did he drink? If Edward drank four gills of lemonade every day, in how many days would he drink a gallon?

Peter drank a quart of lemonade on Labor Day. How many pints did he drink? How many gills did he drink? What part of a gallon did he drink?



Ned said, "I drank as many gills of lemonade on Labor Day as there are stripes in my flag." How many gills did he drink? How many pints did he drink? How many quarts? What part of a gallon did he drink?

Ralph said, "I drank as many gills of lemonade as there are white stripes in your flag." How many gills did Ralph drink? How many pints did Ralph drink? What part of a quart did Ralph drink? What part of a gallon did he drink?

If he drank six gills a day, in how many days will he drink a gallon of lemonade? In how many days will he drink a barrel of lemonade? In how many days will he drink a hogshead of lemonade?

How many cubic inches of lemonade did Ralph drink on Labor Day?

Tell the story of Edward, Peter, Ned and Ralph drinking lemonade on Arbor Day and Labor Day. Write the story.

Tell a story of your own experience about Labor Day. Tell if you drank lemonade. Tell how much you think you drank.

Dry Measure.

2 pints = 1 quart.
8 quarts = 1 peck.
4 pecks = 1 bushel.
2,150.42 cubic inches = 1 bushel of grain.
2688 cubic inches = 1 bushel of vegetables.
60 pounds = 1 bushel of wheat, beans, or potatoes.
32 pounds = 1 bushel of oats.
56 pounds = 1 bushel of rye, flaxseed, or shelled corn.
70 pounds = 1 bushel of corn on the cob.
52 pounds = 1 bushel of buckwheat.

A bushel of corn on the cob is sufficient to make a bushel of shelled corn.

Which is heavier, a bushel of wheat or a bushel of oats?

A bushel of wheat is how much heavier than a bushel of rye?

Which is heavier, two bushels of oats or one bushel of wheat?

Two bushels of oats weigh how much more than one bushel of shelled corn?

What will a bushel of beans cost at 5 cents a pound?

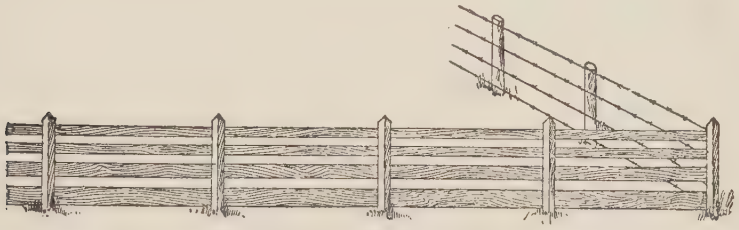
When a bushel of potatoes will sell for 50 cents, what is the value of 24 pounds of potatoes? What is the value of 30 pounds?

When wheat is 75 cents a bushel, what is the value of 300 pounds?

Lumber Measure.

To find the number of board feet in a piece of lumber:

Multiply the length in feet by the width in feet and the thickness in inches. Any thickness less than an inch is computed the same as an inch.



BUILDING A BOARD FENCE.

How many feet of lumber in a board 18 ft. long, 1 ft. wide, and 1 in. thick?

How many feet of lumber in a board 18 ft. long, 8 in. wide, and 1 in. thick?

18′ x 12″ x 1″ = 18 ft. long, 12 in. wide, and 1 in. thick.

18′ x 8″ x 1″ = 18 ft. long, 8 in. wide, and 1 in. thick.

Tell the meaning of the following board measurements:

12′ x 6″ x 1″	12′ x 4″ x 1″	16′ x 9″ x 1″	14′ x 2″ x 4″
12′ x 6″ x 2″	12′ x 6″ x 1″	18′ x 6″ x 2″	12′ x 4″ x 4″

How many feet of lumber in each piece? Find the cost of all the pieces at $30 per M.

Interest.

Many methods of computing interest are recommended in school text-books. None of them excels the six per cent. method in simplicity and rapidity of computation.

Six Per Cent. Method.

Int. on $1 for one year at 6% ..... = $.06.

Int. on $1 for one month at 6% = 1/12 of $.06 = .005.

Int. on $1 for one day at 6% = 1/30 of $.005 .. = .0001/6.

Rule I: Multiply the interest on $1 for the given time by the principal considered as an abstract number.

Rule II: Multiply the number of dollars by the number of days, divide the product by six, and point off three places.

Drill Work in Interest.

$ 2	$ .50	$1,000	$80.00
200	2.50	1,200	80.50
300	4.50	1,500	90.00
400	5.50	3,000	98.50
500	10.50	2,000	75.00
250	20.50	1,250	75.50

Give the interest at 6% on each of the above number of dollars for the number of days given below.

1, 2, 3, 10, 12, 11, 15, 20, 25, 24, 30, 60, 45, 48, 75, 54, 42, 50.

Cubic Measure

When the Rate is Not 6%:

8% = 2% more than 6%.

2% = ⅓ of 6%. Therefore 8% is ⅓ more than 6%, or 4/3 of 6%.

When the interest is 8%, find the interest at 6%, and then take 4/3 of that amount.

When the rate is 7%, take 7/6 of the interest at 6%.

5% is what part of 6%? Tell how to find the interest at 5%. Make a problem using interest at 5%.

4% is what part of 6%? Tell how to find interest at 4%. Make a problem using interest at 4%.

4½% is what part of 6%? Tell how to find interest at 4½%.

Solve the Problems:

What sum of money at 8% interest for 6 months will equal $200? What sum of money at 4% for the same length of time will equal $200?

How many years at 6% interest will it take $500 to yield $75 in interest?

Advanced Work in Interest.

There are five quantities to be considered in interest, namely: principal, amount, interest, rate, and time. Any three of these being given, the other two may be found.

Fill the blank spaces in the following:

Principal.	Interest.	Amount.	Time.	Rate.
$ 500.00	.....	.....	1 yr., 6 mo.	6%
.....	$ 40.00	.....	1 yr.	5%
.....	126.00	$726.00	3 yr., 6 mo.	...
3,960.36	.....	.....	9 mo., 20 da.	8%
1,250.00	218.75	.....	.....	5%
126.00	.....	161.28	.....	5%
260.00	39.52	.....	3 yr., 2 mo., 12 da.	...
.....	75.00	.....	6 yr.	5%
.....	.....	758.40	7 yr., 3 mo.	4%
140.00	.....	168.28	.....	6%

Another method for computing interest in a rapid and simple manner is

The Thousand Day Method.

The interest on any principal in one thousand days at 36% will be exactly equal to that principal. Consequently problems in interest may be solved by the following rule:

Rule—Multiply the principal by the time in days and point off three decimal places, and take such a part of their result as the given interest is of 36.

Percentage.

The subject of percentage may go hand in hand with common fractions. It is as easy for a pupil to understand that 10 is 50 per cent. of 20 as it is for him to master the thought that 10 is ½ of 20. The idea is that of ratio. When a pupil comprehends that 18 is 3 times 6, he can be taught to understand that 18 is 300 per cent. of 6, and since 6 is ⅓ of 18, he can know that 6 is 33⅓ per cent. of 18.

Percentage is the name applied to computations in which the unit of measure is 100. Per cent. is an abbreviation of the Latin *per centum,* which signifies *by the hundred.* The character % means per cent. (See page 356).

100 per cent. of anything is all of it.
1 per cent. of anything is 1/100 of it.
5 per cent. of anything is 5/100 or 1/20 of it.
50 per cent. of anything is 50/100 or ½ of it.

CIRCLE.

CIRCLE.

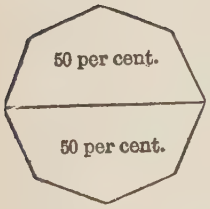
RECTANGLE.

TRIANGLE.

CIRCLE.

25 per cent. of anything is 25/100 or ¼ of it.
20 per cent. of anything is 20/100 or 1/5 of it.
33⅓ per cent. of anything is 33⅓/100 or ⅓ of it.
66⅔ per cent. of anything is 66⅔/100 or ⅔ of it.
10 per cent. of anything is 10/100 or 1/10 of it.
12½ per cent. of anything is 12½/100 or ⅛ of it.
16⅔ per cent. of anything is 16⅔/100 or ⅙ of it.
30 per cent. of anything is 30/100 or 3/10 of it.
75 per cent. = /100 or ——
80 per cent. = /100 or ——
40 per cent. = /100 or ——
60 per cent. = /100 or ——

What per cent. of a number equals 5/5 of it?
$10 is what per cent of $10?
Two times a number, or quantity, is 200 per cent. of it.
Three times a number, or quantity, is 300 per cent. of it.
150 per cent. of a number is how many times the number? What is 150 per cent. of 50? What is 150 per cent. of $20? What is 150 per cent. of 30 apples?
250 per cent. of a number is how many times the number?
2 per cent. = 2% = 2/100 = .02 = 1/50.

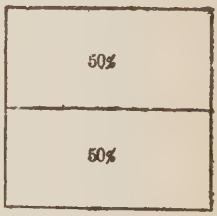


OCTAGON.

SQUARE.

CIRCLE.

SQUARE.



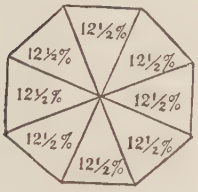
SQUARE.

4 per cent. = 4% = 4/100 = .04 = 1/25.
5 per cent. = 5% = 5/100 = .05 = 1/20.
6 per cent. = 6% = 6/100 = .06 = 3/50.
8 per cent. = 8% = 8/100 = .08 = 2/25.
10 per cent. = 10% = 10/100 = .10 = 1/10.
11 1/9 per cent. = 11 1/9% = 11 1/9/100 = .11 1/9 = 1/9.
12½ per cent. = 12½% = 12½/100 = .12½ = ⅛.
14 2/7 per cent. = 14 2/7% = 14 2/7/100 = .14 2/7 = 1/7.
16⅔ per cent. = 16⅔% = 16⅔/100 = .16⅔ = ⅙.

20 per cent. = 20% = 20/100 = .20 = 1/5.
25 per cent. = 25% = 25/100 = .25 = 1/4.
33⅓ per cent. = 33⅓% = 33⅓/100 = .33⅓ = 1/3.
50 per cent. = 50% = 50/100 = .50 = 1/2.
66⅔ per cent. = 66⅔% = 66⅔/100 = .66⅔ = 2/3.
75 per cent. = 75% = 75/100 = .75 = 3/4.

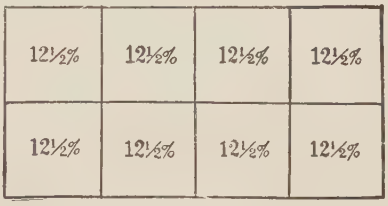
Study of 12½% and 10%.

A figure having eight straight sides is an octagon.



OCTAGON.

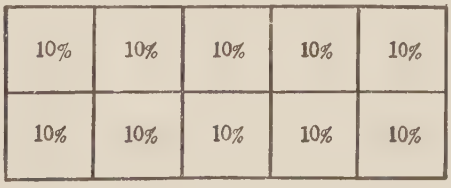
SQUARE.



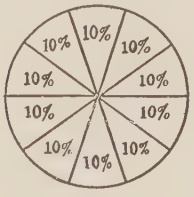
RECTANGLE.

What part of an octagon is 12½% of it?
What part of a rectangle is 12½% of it?
Draw a rectangle and show how to get 12½% of it.
What part of a square is 12½% of it?
Draw a square and show how to get 12½% of it.
A man had 72 eggs in a basket. How many dozen had he?
He sold 50% of his eggs to the grocer. How many eggs did he sell to the grocer? How many dozen did he sell to the grocer?
If he received 20 cents a dozen for his eggs, how much money did the grocer pay him? The grocer gave him a one-dollar bill in payment. What change should the man give the grocer?
Name three pieces of money that would be equivalent in value to this amount. Name four pieces that would be equivalent. Name four others.
What five pieces of money would be equivalent to the change the man gave the grocer? What seven pieces would be equivalent to this amount? What eight pieces would be equivalent to this amount?
Relate the story of the man selling eggs to the grocer, telling the different ways the man could make the change when the grocer gave him one dollar for the eggs.
A figure bounded by ten straight sides is called a decagon. 10% of a decagon is what part of the decagon?

DECAGON.



RECTANGLE.



CIRCLE.

What part of a rectangle is 10% of it? Draw a rectangle and show how to find 10% of it.
10% of a circle is what part of it? What per cent. of a circle is 1/10 of it? Ten cents are 10% of how much money?

How many minutes is 10% of an hour?

Five cents are 10% of how much money?

Ten cents are 12½% of how much money? Five cents are 12½% of how much money?

100% of ten cents is how many cents? How many cents in 100% of five cents?

10 cents are what per cent. of 10 cents? Five cents are what per cent. of ten cents? 5 cents are what per cent. of 20 cents?

Two times anything is 200% of it. What is 200% of five cents? Ten cents are what per cent. of five cents? What is 200% of ten cents?

What is meant by 250% of anything? 25 cents is what per cent. of ten cents? What would be 250% of a dollar? One dollar is 250% of how much money?

How many per cent. make a whole square? How many per cent. make a dollar?

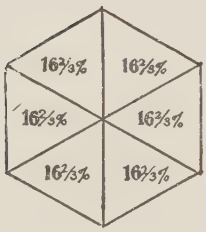
What is 100% of ten books? What is 100% of three watermelons?

An acre of land that cost $40 was sold at a gain of 100%. At what price was it sold?

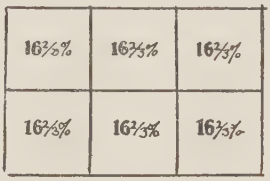
What per cent. of anything is 1/100 of it? What per cent. of a square is 1/100 of it? What per cent. of anything is 2/100, 3/100, 7/100, 9/100, 11/100?

What is 1% of $1? What is 8% of $1? What is 15% of $1? What is 12½% of $1? What is 12½% of $2? What is 16⅔% of $3?

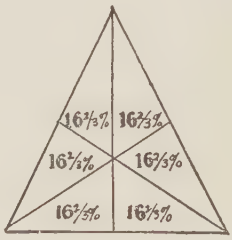
Study of 16⅔%.



HEXAGON.



RECTANGLE.



TRIANGLE.

What part of a hexagon is 16⅔% of it? 16⅔% of a hexagon is what part of 33⅓% of the same hexagon? 16⅔% of a hexagon is what per cent. of 33⅓% of the same hexagon?

16⅔% of a hexagon is what part of 50% of the same hexagon? 16⅔% of a hexagon is what per cent. of 50% of the same hexagon?

⅙ = what part of ⅓? ⅙ = what per cent. of ⅓? ⅙ = what part of ½? ⅙ = what per cent. of ½?

33⅓% of a hexagon is what part of 50% of the same hexagon? 33⅓% of a hexagon is what per cent. of the same hexagon?

⅓ = what part of ½? ⅓ = what per cent. of ½?

16⅔% of a rectangle is what part of a rectangle? Draw a rectangle and show how to get 16⅔% of it. 16⅔% of a rectangle is what part of 50% of a rectangle of the same size? 16⅔% of a rectangle is what per cent. of 50% of a rectangle of the same size?

⅙ = what part of ½? ⅙ = what per cent. of ½?

16⅔% of a triangle is what part of a triangle?

50% of a triangle is what part of it? 16⅔% of a triangle is what part of 50% of a triangle of the same size? 16⅔% of a triangle is what per cent. of a triangle of the same size?

How many minutes in 16⅔% of an hour? How many inches in 16⅔% of a foot?

16⅔% of a yard = —— in.

16⅔% of a yard = —— in.

MARY'S VACATION.

Mary went to the country to spend her vacation. She visited a woodland beautified by wild flowers. She picked four dozen roses. How many did she pick? She made a bouquet of 50% of them. How many roses in the bouquet? She sent 25% of her roses to her mother. How many roses did she send to her mother? 16⅔% of them she gave to a crippled girl who was not able to pick roses. How many roses did she give to the crippled girl?

The rest of the roses she put in a vase in her room. How many roses in her vase? The number of roses in her vase is what part of the number she gave the crippled girl? What per cent. are they?

The number of roses in her vase is what part of the number she sent her mother? What per cent. are they of the number she sent her mother?

The number in her vase is what part of the number in the bouquet? What per cent. of the number in the bouquet?

The number she sent her mother is what part of the number in the bouquet? What per cent. is it?

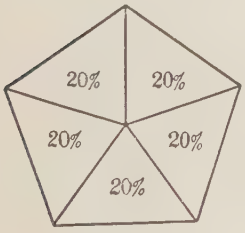
The number she gave the crippled girl is what part of the number in the bouquet? What per cent. is it?

The number she gave the crippled girl is what part of the number she sent her mother? What per cent. is it?

Tell the story of Mary and her roses. Write the story.

Write an original story about gathering flowers, using correctly 16⅔%, 50%, 25%, and 33⅓%.

A pentagon is a figure bounded by five straight lines.



PENTAGON.

RECTANGLE.

CIRCLE.

What part of a pentagon is 20% of it?

What part of a circle is 20% of it?

20% of a rectangle is what part of the rectangle? Draw a rectangle and show how to get 20% of it.

⅕ of a circle is what per cent. of the circle?

20% of ten cents = —— cents. What is 20% of 25 cents? What is 20% of 50 cents? What is 20% of 40 cents? What is 20% of 40 marbles?

A merchant bought oranges for 20 cents a dozen and sold them for 20% more than he paid. What did he sell the oranges for per dozen? What would be the price of half a dozen?

STORY OF WALTER AND THE CHERRIES.

CHERRY TREE.

Walter's father was dead. His mother worked hard to provide her son with food, clothes, books, and other necessities of life.

One bright morning in June, Walter ran to his mother exclaiming, "Mother, I am going to help you. I am going to earn some money. Mr. Brown offers me two cents a quart for picking cherries."

It was Monday morning and Walter with a happy face and a glad heart seized a basket and started for Mr. Brown's cherry orchard.

Five saucy birds sat in the tree. One flew away. What per cent. of the birds flew away?

Walter had never picked berries before and he thought it would be great sport. He climbed upon a stepladder and reached for a branch upon which were clusters of red cherries. Into the basket he began to drop the fruit.

Gazing into his basket, he saw them and saw he had picked ten. How delicious they looked! Then the boy said to himself, "I'll eat just 20% of those ten cherries." How many cherries did he eat?

Walter worked until he was tired. Mr. Brown measured the fruit Walter had picked and found he had picked a bushel. "How many quarts will that be?" said Mr. Brown. Walter answered him correctly. What did Walter say? At two cents a quart, how much money did Walter earn on Monday?

Mr. Brown had picked 50% more than Walter. How many quarts of cherries had Mr. Brown picked?

Tuesday Walter picked 25% more than he did Monday. How many did he pick Tuesday? How much money did he earn on Tuesday?

Wednesday he picked 20% more than he did on Tuesday. How many quarts did he pick on Wednesday? How much money did he earn on Wednesday?

Thursday he picked only 50% as many as he did on Wednesday. How many quarts did he pick on Thursday? How much money did he earn on Thursday?

Friday he picked 16⅔% more than he picked on Thursday. How many quarts did he pick on Friday?

Saturday he picked 33⅓% less than he picked on Wednesday. How many quarts did he pick Saturday? How much money did he earn on Saturday?

On what two days did he pick the same number of quarts? How many quarts did he pick during the week? How many bushels? How many pecks?

How much money did he earn during the week? Did he earn more or less than $5.00? How much?

How many more quarts would it have been necessary for him to have picked enough to have earned $5.00?

What is 20% of $5.00? On Wednesday, did he earn more or less than 20% of $5.00? How many more quarts would he have needed to pick on Wednesday in order to have earned 20% of $5.00?

Tell the story of Walter picking cherries. Write the story. Do you think Walter was happy? Why? Make a similar story of your own construction.

Vertical and Horizontal Lines.

Draw a line straight up and down. Such a line is called a *vertical line.*

Draw a line straight right and left. Such a line is called a *horizontal line.* Draw a short vertical line crossing a horizontal line of the same length. + This is the *plus sign* and means more or add.

Fill Blanks.

$2 + 4 =$ —— $3 + 3 =$ —— $4 + 3 =$ —— $4 + 4 =$ ——

Tell how a plus sign is made. Tell about each of the above operations.

Draw two vertical lines. Draw two times as many horizontal lines. Draw eight lines, half of them vertical and the other half horizontal. What is ½ of eight? $8 =$ —— times 4.

Draw ten lines, half of them vertical and the other half horizontal. ½ of $10 =$ —— $10 = 2$ times ——

Twelve is one dozen.

Draw a dozen lines, half of them vertical and the other half horizontal.

½ of $12 =$ —— —— is one-half a dozen.

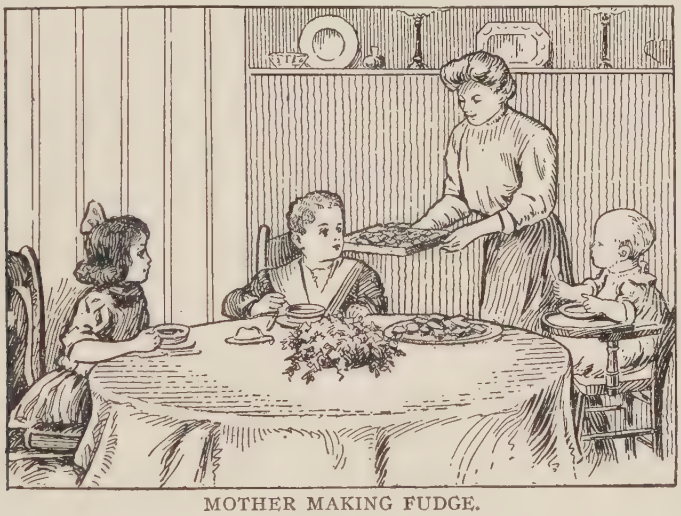
A short horizontal line — means *minus* or take away. $4 - 2 =$ —— $5 - 2 =$ —— $6 - 2 =$ —— $7 - 2 =$ —— $7 - 3 =$ —— $8 - 5 =$ —— $6 - 4 =$ ——

Tell a short story about each of the operations above. Put the stories in writing.

AN ARITHMETICAL STORY.

Mother makes fudge for the children. She molds it in two pans. One pan is an inch deep and the other one is half an inch deep.

Each pan is full. Next mother cuts the fudge into cubes, making each as wide and long as the pan is deep.



MOTHER MAKING FUDGE.

Johnnie, from which pan do you want your cube of fudge? Why?

Each child shall have a cube from each pan. What is the size of each cube?

How many of the small cubes will make one of the large ones?

The large cube is how many times the small one?

The small cube is what part of the large one?

A one-inch cube is how many times a half-inch cube?

A half-inch cube is what part of a one-inch cube?

How long, how wide, and how thick is a two-inch cube?

How many one-inch cubes will make a two-inch cube?

A one-inch cube is what part of a two-inch cube?

How many cubic inches in a two-inch cube? Prove by cutting a two-inch cube from a potato or turnip.

How long, how wide, and how thick is a three-inch cube?

How many one-inch cubes in a three-inch cube?

A three-inch cube is how many times a one-inch cube?

A one-inch cube is what part of a three-inch cube? Prove your answer by an actual demonstration.

FRED GOES FISHING.

One morning Fred rose ten minutes before six. He spent 15 minutes dressing, five minutes washing and combing, and ten minutes eating his breakfast.

What was the time when he finished his breakfast?

After breakfast he spent fifteen minutes fixing his pole and line, after which he spent 30 minutes digging bait.

He then started for the lake. What was the time when he started?

What was the time when he began to dig bait?

What was the time when he finished dressing?

How much time did he spend in dressing, washing and combing, eating, preparing his pole and line, and digging his bait? The number of minutes spent in digging bait were how many times the number of minutes spent in dressing? The time spent in eating was what part of the time used in fixing his pole and line?

Pupils may write similar stories about going picnicking or some other pleasure or excursion.

Review Lessons in Percentage.

LESSON I. (See page 420).

An octagon is a figure with eight sides.

What part of an octagon is 50% of it?

What part of a square is 50% of it? Draw a square and show how to get 50% of it.

What part of a square is 25% of it? Draw a square and show how to get 25% of it.

Draw another square and show another way of getting 25% of it.

What part of a circle is 50% of it? Draw a circle and show how to get 50% of it.

25% of a circle is what part of it? Draw a circle and show how to get 25% of it.

A triangle is a plane figure bounded by three straight lines.

50% of a triangle is what part of it? Draw a triangle and show how to get 50% of it.

25% of a triangle is what part of it? Draw a triangle and show how to get 25% of it.

50% of a rectangle is what part of it? Draw three rectangles and show three different ways of getting 50% of a rectangle.

LESSON II.

What part of a rectangle is 25% of it? Draw a rectangle and show how to get 25% of it.

A boy having ten cents spends 50% of it. How much money does he spend? How much money has he left?

A boy having 50 cents spends 50% of it. How much money does he spend? How much has he left?

Make many stories about 50% of things. Cut an apple to show 50% of it. Make a drawing to show 50% of an apple.

How many minutes in an hour? How many minutes in 50% of an hour? How many minutes in 25% of an hour?

How many hours in 50% of a day? How many hours in 25% of a day?

How many things in a dozen? How many in 50% of a dozen? How many in 25% of a dozen?

How many pecks in a bushel? How many in 50% of a bushel? How many in 25% of a bushel?

How many quarts in a peck? How many in 50% of a peck? How many in 25% of a peck?

How many ounces in a pound of sugar? How many ounces in 100% of a pound of sugar? How many in 50% of a pound of sugar? How many in 25% of a pound of sugar?

A bushel of oats contains 32 pounds. How many pounds in 50% of a bushel of oats? How many pounds in 25% of a bushel of oats?

There are 12 inches in a foot. How many inches in 50% of a foot? How many inches in 25% of a foot?

There are ten cents in a dime. How many cents in 50% of a dime? A nickel is what per cent. of a dime? Ten cents is what per cent. of a dime?

Lesson III.

Ten cents is what per cent. of 20 cents? What is 50% of 20 cents? Ten cents is 50% of how many cents? Ten cents is what per cent. of 40 cents? What is 25% of 40 cents? Ten cents is 25% of how many cents?

In a class of 18 pupils 50% are absent. How many are absent? How many are present? In a class of 20 pupils 25% are absent. How many present? In a class of 20 pupils 25% are absent. How many are absent? How many are present? The number of pupils absent is what part of the number present? The number of pupils absent is what part of the number that equals this difference? What per cent. is it?

A boy bought a knife for 20 cents and sold it for 50% more than he paid for it. What did he get for this knife?

Henry had 24 marbles. He lost 25% of them. How many marbles did he lose? How many had he left? The number he lost is what part of the number he had left? The number he had left is how many times the number he lost?

William had 16 marbles and lost 100% of them. How many did he lose? He found 50% of what he lost. How many did he find? He then sold 50% of what he found. How many did he sell? How many had he left? He gave away 25% of what he then had. How many marbles did he give away? He put the rest in his pocket. How many marbles in his pocket?

Tell the story of William and his marbles. Write the story.

Make another story about some boy and his marbles, using 50% and 25% correctly in the story.

Lesson IV.

$33\frac{1}{3}\%$ of anything is $\frac{1}{3}$ of it.

$33\frac{1}{3}\%$ of a circle is what part of the circle?

A figure having six sides is a hexagon. What part of a hexagon is $33\frac{1}{3}\%$ of it?

Oliver caught nine fish. $33\frac{1}{3}\%$ of them were too small to put on the string and he threw them into the water. How many fish did he throw into the water? How many fish did he take home? The number he threw into the water is what part of the number he took home? The number he threw back is what per cent. of the number he took home?

Bert caught 12 fish. He threw back $33\frac{1}{3}\%$ of them and put the rest on his chain. How many were left to put on his chain? He gave a sick man 50% of those on his chain. How many fish did he give the sick man? How many fish had he left after his donation to the sick man? These he took home. Bert ate 50% of them

for his dinner. His mother ate 25% of them and his father ate the rest. How many fish did Bert eat? How many did his mother eat? How many did his father eat?

The number the mother ate is what part of the number Bert ate? The number the father ate is what per cent. of the number Bert ate? The number the mother ate is what per cent. of the number the father ate? The number the mother ate is what per cent. of the number he took home?

Tell the story of Bert and his fish. Write the story.

What part of a rectangle is 75% of it? 25% of a rectangle is what part of 75% of the same rectangle?

How many cents in ¾ of a dollar? 75 cents is what part of a dollar? What per cent. is it?

Lesson V.

What part of a rectangle is 33⅓% of it? What part of a rectangle is 66⅔% of it? 33⅓% of a rectangle is what part of 66⅔% of the same? Make the drawing of a rectangle showing how to get 66⅔% of it.

⅓ of a rectangle is what part of ⅔ of the same rectangle? ⅓ of a rectangle is what per cent. of ⅔ of the same rectangle?

While combinations in addition should precede subtraction, the two processes should go hand in hand as early as possible in the education of the child.

Children love to work with their hands and the wise teacher or mother keeps the hands of the little ones busy, as the time is passing that prepares the mind for the grasping of abstract number work.

For Example. Children draw two circles. (The children being previously instructed to bring some circular object with which to draw the circle in case they are not able to make a circle by using a string.) Divide the circle into four equal parts. Draw a small circle in each part of the large circle.

How many large circles are there? How many small circles are there? How many circles in all? How many more small circles than larger ones?

Have the child write the figure that represents each number he uses.

Lesson VI.

Continue the exercise, having the children draw three large circles, dividing each into four equal parts and placing a small circle in each part. This exercise gives the child work to do with both his hand and his brain. He learns also to count as well and compare objects.

The child will gladly furnish himself with corks or other materials with which to draw circles. Use the square in the same way, as well as in other ways.

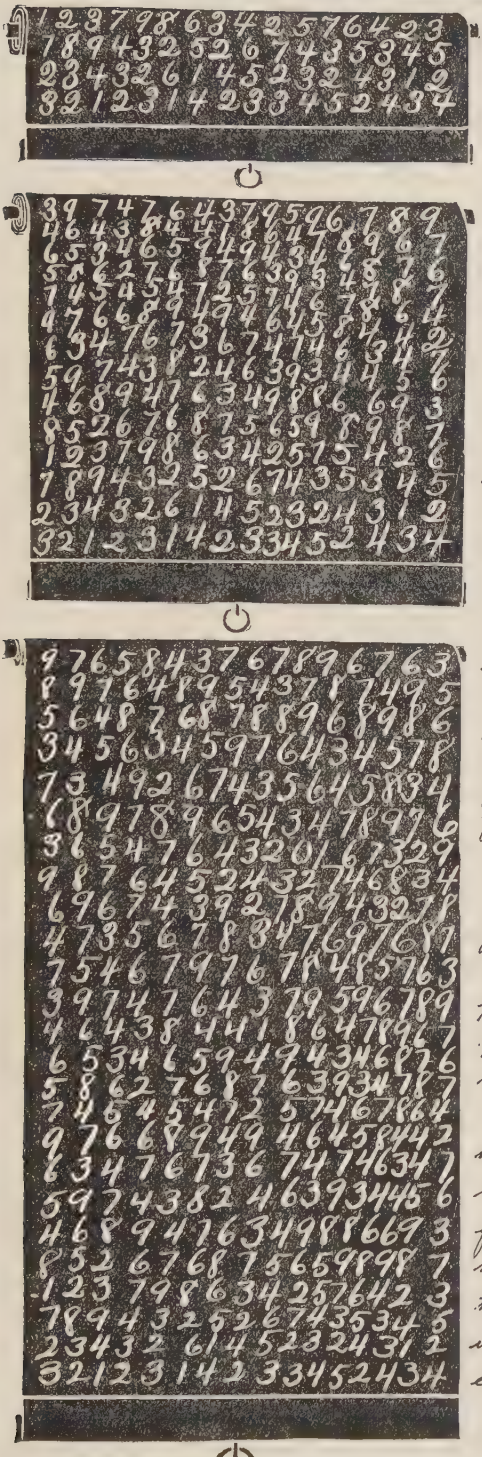
How many circles in the first and second squares? How many circles in the first, second, and third squares? How many in the fourth square? How many more circles in the first than in the third? How many in both the first and the third? How many in the second and third? How many in the first and fourth? How many in the second and the fourth? How many in the third and fourth?

Which square contains the greatest number of circles? How many more does it contain than the first? How many more than the second?

How many more does the fourth contain than both the first and second? How many more does the fourth contain than both the first and third? How many more does the fourth contain than the third? How many more does the fourth square contain than the other three together?

The above exercise can be used in almost an endless number of ways and will furnish scores of combinations. In all cases require the child to make the squares and circles, the teacher indicating the number of objects to be made.

Rapid Addition



Rapid Addition

Nine-tenths of the mechanical work in arithmetic is addition and multiplication and nearly all of the errors occur in one or the other of these simple operations.

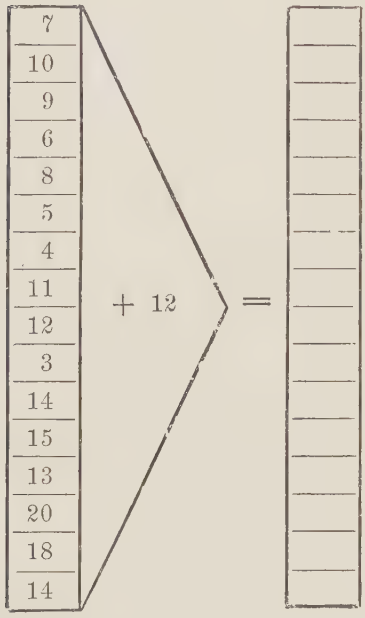
We give here one of the best devices ever invented for training pupils to add rapidly and accurately. Purchase a window shade roller, black oil cloth, and a tube of white paint. Put the figures on in a manner as shown in the cut opposite. By raising and lowering the shade the depth can be increased or diminished. No chalk dust, or time wasted in making erasures and writing figures for practice.

Fifteen minutes daily practice for six months with this chart pupils acquire a rapidity of 75 to 150 per minute in addition, their previous speed usually being about 8 to 12 figures per minute.

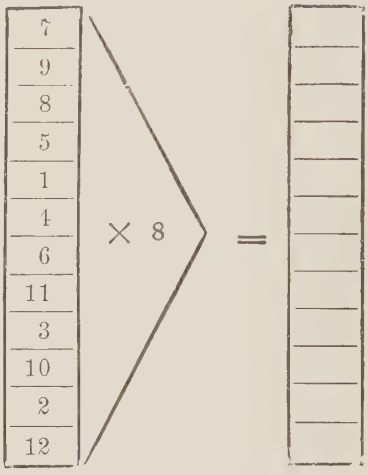
Have your children try adding with this chart and time them with a watch, and see how many figures they add per minute, note their improvement as it will be something marvelous. The sums can be written with crayon at the bottom of the chart and erased at pleasure.

Devices for Busy Work.

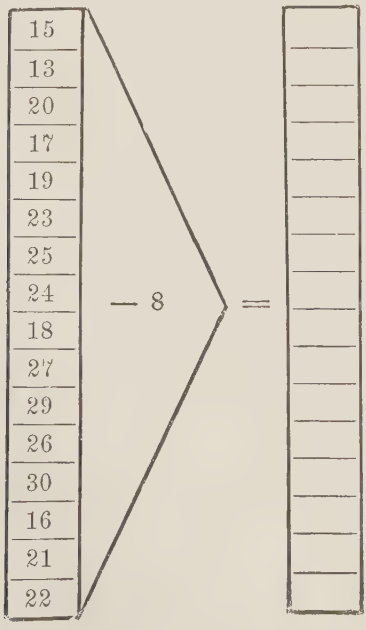
Place the sum of twelve and each number in the square on the left in the opposite space on the right.



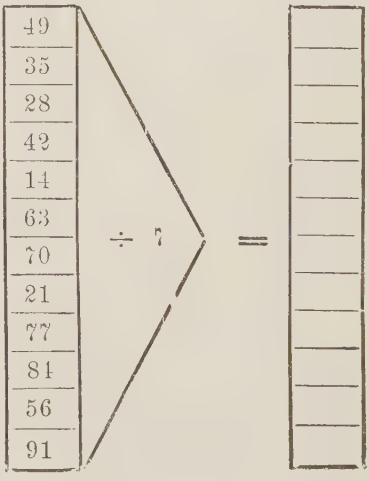
Place the product of eight and each number in the square on the left in the corresponding square on the right.



Place the difference in these spaces.

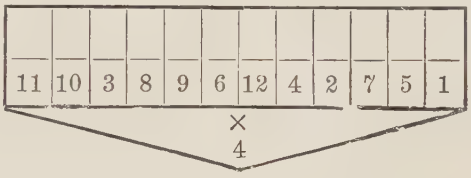


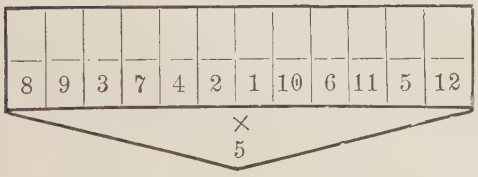
Place the quotient in these spaces.

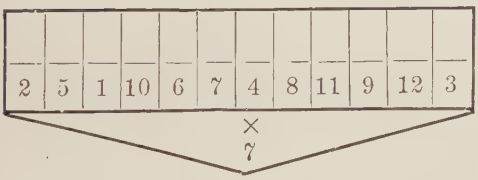


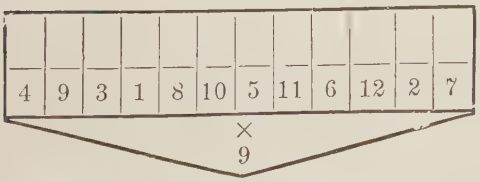
Charts for the Multiplication Tables.

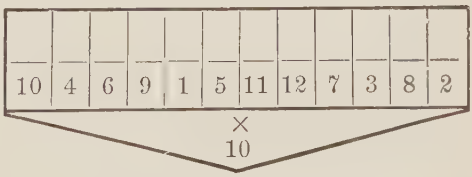
Place the product of two and each number in the square in the blank square above. For example, place 22 in the blank above 11. Have the pupils make the diagram. Insist upon neat figures and drawings and accurate computations.

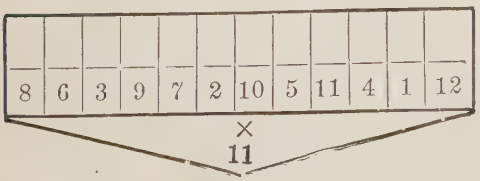


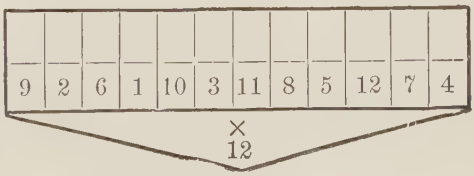




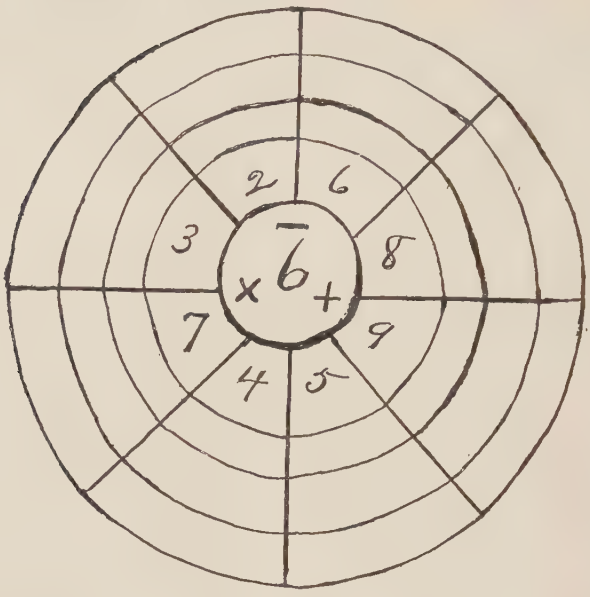








Device for Busy Work.



These concentric circles can be drawn by the students, either evenly or otherwise. Most children will take pride and delight in finding materials by which to draw the circles equally distant apart. Strings may be used.

In the first space place the sum of 6 and the numbers surrounding 6.

In the second space place the difference between 6 and the numbers surrounding 6.

In the third space place the product of 6 and the numbers surrounding 6.

Change the number in the center of the circle and continue the exercises. This will furnish both oral work and seat work for the children. After the oral work is done the children will find busy work in making the circles and filling the spaces with the results.

☞If the figure in the second space is larger than the figure in the first space, reverse the order in subtraction, subtracting the smaller from the larger one.

Put Off Town.

Did you ever go to Put Off Town,
Where the houses are old and tumbled-down,
And everything tarries and everything drags,
With dirty streets and people in rags?

On the street of Slow lives old man Wait
And his two little boys named Linger and Late,
With unclean hands and tousled hair,
And a naughty sister named Don't Care.

Did you ever go to Put Off Town
To play with the little girls Fret and Frown?
Or go to the home of old man Wait,
And whistle for his boys to come to the gate?

To play all day on Tarry street,
Leaving your errands for other feet,
To stop or shirk or linger or frown
Is the nearest way to this old town.

Metrical Weights and Measures.

The French Metrical System is based upon the (assumed) length of the fourth part of a terrestrial meridian. The tenth-millionth part of this arc was chosen as the unit of measure of length, and called a *Metre*. The cube of the tenth part of the metre was adopted as the unit of capacity, and denominated a *Litre*. The weight of a litre of distilled water at its greatest density was called a *Kilogramme*, of which the thousandth part, or *Gramme*, was adopted as the unit of weight. The multiples of these, proceeding in decimal progression, are distinguished by the employment of the prefixes *deca*, *hecto*, *kilo*, and *myria*, from the Greek, and the subdivisions by *deci*, *centi*, and *milli*, from the Latin:—

MEASURE OF LENGTH (UNIT METRE).

EQUAL TO	Inches.	Feet.	Yards.	Fathoms.	Miles.
Millilitre, or cubic centim...	0.03937	0.003	0.001	0.000	0.000
Centimetre	0.39371	0.032	0.010	0.005	0.000
Decimetre	3.93708	0.328	0.109	0.054	0.000
METRE	39.37079	3.280	1.093	0.546	0.000
Decametre	393.70790	32.808	10.936	5.468	0.006
Hectometre	3937.07900	328.089	109.363	54.681	0.062
Kilometre	39370.79000	3280.899	1093.633	546.816	0.621
Myriametre	393707.90000	32808.991	10936.330	5468.165	6.213

CUBIC, OR MEASURES OF CAPACITY (UNIT LITRE).

EQUAL TO	Cub. In.	Cub. Feet.	Pints.	Gallons.	Bshls.
Millilitre, or cubic centim...	0.06103	0.000	0.001	0.000	0.000
Centilitre, 10 cubic do.....	0.61027	0.000	0.017	0.002	0.000
Decilitre, 100 cubic do.....	6.10271	0.003	0.176	0.022	0.002
LITRE, or cubic Decimetre...	61.02705	0.035	1.760	0.220	0.027
Decalitre, or Centistere.....	610.27052	0.353	17.607	2.200	0.275
Hectolitre, or Decistere.....	6102.70515	3.531	176.077	22.009	2.751
Kilolitre, or Stere.....	61027.05152	35.316	1760.773	220.096	27.512
Myrialitre, or Decastere....	610270.51519	353.165	17607.734	2200.966	275.120

MEASURES OF WEIGHT (UNIT GRAMME).

EQUAL TO	Grains.	Troy oz.	Avoir. lb.	Cwt.=112 lb.	20 cwt.
Milligramme	0.01543	0.000	0.000	0.000	0.000
Centigramme	0.15432	0.000	0.000	0.000	0.000
Decigramme	1.54323	0.003	0.000	0.000	0.000
GRAMME	15.43235	0.032	0.002	0.000	0.000
Decagramme	154.32349	0.321	0.022	0.000	0.000
Hectogramme	1543.23488	3.215	0.220	0.001	0.000
Kilogramme	15432.34880	32.150	2.204	0.019	0.000
Myriagramme	154323.48800	321.507	22.046	0.196	0.009

SQUARE, OR MEASURES OF SURFACE (UNIT ARE).

EQUAL TO	Sq. Feet.	Yards.	Perches.	Roods.	Acres.
Centiare, or sq. metre.....	10.764299	1.196	0.039	0.000	0.000
ARE, or 100 sq. metres.....	1076.429934	119.603	3.953	0.098	0.024
Hectare, or 10,000 sq. m...	107642.993419	11960.332	395.382	9.884	2.471

TABLE FOR CONVERTING METRIC WEIGHTS AND MEASURES.

Metres into yards.	Kilometres into miles and yards.		Litres into gallons and quarts.		Hectolitres into quarters and bushels.	
1= 1.094	1= 0	1094	1= 0	0.880	1= 0	2.751
2= 2.187	2= 1	427	2= 0	1.761	2= 0	5.502
3= 3.281	3= 1	1521	3= 0	2.641	3= 1	0.254
4= 4.374	4= 2	855	4= 0	3.521	4= 1	3.005
5= 5.468	5= 3	188	5= 1	0.402	5= 1	5.756
6= 6.562	6= 3	1282	6= 1	1.282	6= 2	0.507
7= 7.655	7= 4	615	7= 1	2.163	7= 2	3.258
8= 8.749	8= 4	1709	8= 1	3.043	8= 2	6.010
9= 9.843	9= 5	1043	9= 1	3.923	9= 3	0.761
10= 10.936	10= 6	376	10= 2	0.804	10= 3	3.512
20= 21.873	20= 12	753	20= 4	1.608	20= 6	7.024
30= 32.809	30= 18	1129	30= 6	2.412	30= 10	2.536
40= 43.745	40= 24	1505	40= 8	3.215	40= 13	6.048
50= 54.682	50= 31	122	50= 11	0.019	50= 17	1.560
60= 65.618	60= 37	498	60= 13	0.823	60= 20	5.072
70= 76.554	70= 43	874	70= 15	1.627	70= 24	0.585
80= 87.491	80= 49	1251	80= 17	2.431	80= 27	4.097
90= 98.427	90= 55	1627	90= 19	3.325	90= 30	7.609
100=109.363	100= 62	243	100= 22	0.039	100= 34	3.121
200=218.727	200=124	487	200= 44	0.077	200= 68	6.242
300=328.090	300=186	730	300= 66	0.116	300=103	1.362
400=437.453	400=248	973	400= 88	0.155	400=137	4.483
500=546.816	500=310	1217	500=110	0.193	500=171	7.604

How to Have a Good School

PHYSICAL CONDITIONS.

1. Desirable.
   a. Commanding view for schoolhouse site.
   b. A well-kept, neat, attractive yard of ample size.
   c. A neat, well-painted, commodious building with large covered porch, cloakrooms, closets for supplies, and small library room.
   d. Adjustable seats, good pictures on the walls, etc.
   e. A good wood shed.
2. Necessary.
   a. Good outbuildings; suitable fuel in abundance.
   b. A good supply of pure water.
   c. Proper ventilation and proper lighting of schoolhouse.
   d. Suitable apparatus and supplies.
   e. Sanitary surroundings.

THE SCHOOL BOARD.

1. Should take a personal interest and pride in the success of the school.
2. Should coöperate with the teacher, and give her all the encouragement and help possible without making themselves troublesome.
3. Should be loyal to the teacher and support her, if possible, in all trouble growing out of school discipline.

THE PATRONS.

1. Should give their hearty support to the teacher and not let local quarrels or factions disturb the school.
2. Should visit the school occasionally and should, if possible, go when specially invited by the teacher.
3. Should pay little attention to the ordinary school tales of the children.
4. Should support the board and the teacher in their efforts to maintain a good school.
5. Should send their children to school on time every day, if possible.

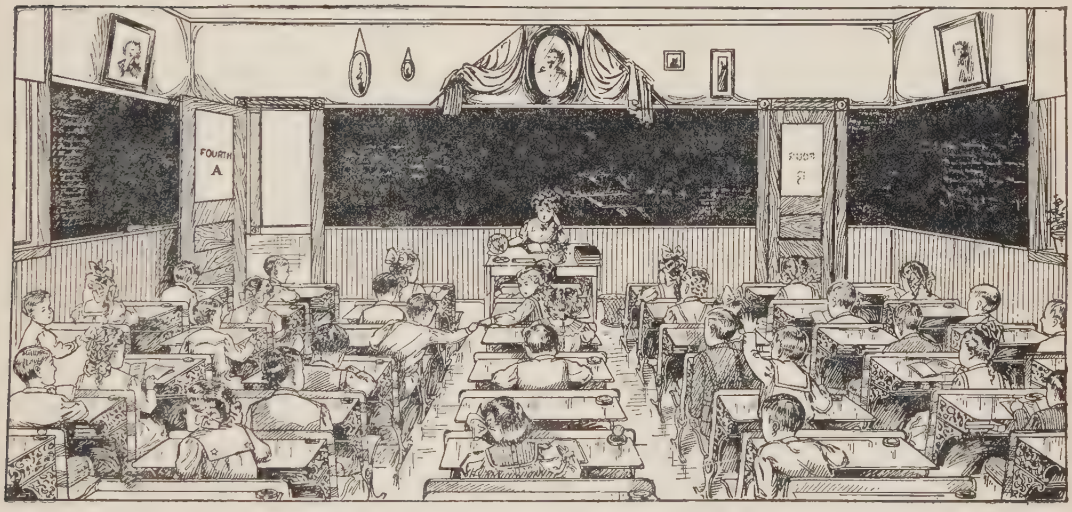
THE PUPILS.

1. Should attend school *regularly,* and be *on time* always, if possible.
2. Should have their lessons prepared on time every day.
3. Should take pride in the good name of the school.
4. Should help in all ways they can to make the school a success. This they can do by being regular and prompt; by attending closely to the business of the hour, whatever it may be; by being cheerful, good-natured, and ready to obey the teacher; by being ready at all times to help those who need their help on the playground or on the way to and from school.

THE TEACHER.

The teacher is the life of the school. "As is the teacher so is the school." If the teacher is cross, irritable, and unsympathetic, the school cannot be a good one, no matter how favorable the conditions otherwise. On the other hand, an earnest, sympathetic, capable teacher will do much to redeem the most unpromising situation.

1. *She should be master of the situation.* She should show good generalship. Teachers who have much or long continued trouble with the discipline are not good generals. They lack tact, good sense, firmness, courage, scholarship, interest in the work, training, pleasing and forceful personality, or some other thing; but the lack is there, and they should analyze themselves till they find out what is wrong and then remedy the fault or quit the business of teaching.
2. *She should be courteous and dignified,* not easily annoyed or angered. This does not mean that she should be indifferent to disorder or inattention on the part of the pupils to their duty. She should greet her pupils pleasantly, but not gush over them; should so conduct herself that they will feel free with her, but not familiar; their respect should be deep and genuine. This can be brought about only when the teacher is earnest, sympathetic, dignified, and competent, living for and with her school.
3. *She should be prompt,* never tardy in getting to school, never tardy in her work in the schoolroom, never tardy in calling school to order, but never in too great a hurry to get away from the schoolhouse at noon or at the close of the day. (Some teachers remain at the schoolhouse much longer than is necessary. This is an unfortunate habit, for the air is usually bad, and a change of scene after the labors of the day is much to be desired.)



REAR VIEW OF A MODEL SCHOOLROOM.

4. *She should be firm,* and should be so confident of herself that she can talk in low, decisive tones without threat or bluster even under the most trying circumstances.
5. *She should be natural,* should be herself. But the natural self should be ladylike, dignified, courteous, alert, and active.
6. *She should be physically well.* Doubtless many good teachers are not blessed with good health, but this is a great misfortune at best, and it makes successful work much more difficult. Often people suffer needlessly for years because they fail to get the advice of competent physicians. Often people are not well simply because they do not pay proper attention to the well-known laws of health.
7. *She should be progressive and up-to-date.* "Only growing teachers are fit to lead growing pupils." And she should have a good reference library, spend some time in her own personal advancement, and know *how* to use these outlines in her classes.

8. *She should be devoted.* "Teaching demands consecrated lives and the time and energies of the most gifted."
9. *She should be prepared.* "The most prepared teacher works in the light of the educational thought and experience of all the ages."
10. *She should be just.* Otherwise pupils will not respect her and her influence will be minimized.
11. *She should be tactful.* The tactful teacher will avoid many unnecessary conflicts and disagreeable situations.
12. *She should be courteous.* A schoolroom is a poor place for a timid, shrinking soul. The teacher should be a leader, fearless, conscious of her own power, and self-possessed, even when most sorely tried. The teacher who does her duty has the support of the laws, the school board, the enlightened public sentiment of the district and, best of all, her own conscience. A teacher should so teach and so govern that she will not in the years to come have to blush at the recollection of her weakness or cowardice. Often she will be in doubt, as to what is best to do, but she should throw her fears to the wind in settling the question.

So far as the Pupils are Concerned, the Tests of Sound Class Discipline are:

1. Prompt and willing obedience.
2. Close attention.
3. Pleasure in giving satisfaction to the teacher.
4. Eagerness to answer questions combined with thoughtful answering.
5. Good manners and right conduct generally.
6. Thoroughness in work.
7. Good order without unnecessary physical restraint; collective and individual self-control.

The Recitation.

In the recitation the battle is lost or won. Success here almost invariably means a good school. Failure here means failure all along the line. The teacher's purpose must not be merely to hear the children say over some things they may have learned from books, but she must look upon the recitation as the chance of her life as a teacher, and as the chance of the child's life in its development. The lines must be drawn tight; the electric spark must fly and the child's life must be quickened. All things must be conducive to this end.

Here we find the immense value of these outlines and this work of general reference, as they give us methods, materials, and plans, and we get results when otherwise recitations would be dull and uninteresting.

Methods of Conducting Recitations.

1. Speak—
   a. In low tones.
   b. Distinctly.
   c. Not too rapidly.
2. Do not prompt or assist—
   a. In the recitation.
   b. In examination.
3. Be polite to pupils.
4. Do not repeat—
   a. Questions.
   b. Answers.
5. Govern yourself.
6. Govern your pupils.

7. Prepare for recitation.
8. Let your words and acts be worthy of your profession.
9. Be—
   a. Original.
   b. Enthusiastic.
   c. Energetic.
   d. Spirited.
   e. Sympathetic.
   f. Kind.
   g. Cheerful.
   h. Firm.
   i. Self-possessed.
   j. Dignified.
   k. Patient.

ENDS IN TEACHING.

Ends to be obtained in teaching—
1. Knowledge.
2. Power.
3. Skill.
4. Character building.

SUGGESTIONS TO TEACHERS.

Wake up! Whether you are a sleepy teacher or a sleeping teacher, it is simply time for you to wake up. Your pupils see that you are stupid and slow and they are running away from you. You are wasting precious time and allowing golden opportunities to go by unimproved.

Wash up! A sleepy teacher needs to wash up. Nothing but a good body bath and vigorous rubbing will bring him out of his stupor and start circulation. The sleepy teacher is sure to be slovenly in person as well as slovenly in his schoolroom and in his work.

Brush up! Your clothing as well as your hair needs brushing at least once a day. Dust your books, your desk, and the furniture generally about the schoolroom. Have you failed to notice the cobwebs in every corner, the old rusty stove, and the greasy looking blackboards? But you need to brush up mentally still more.

Brace up! Your despondency and hesitancy have almost unfitted you for any aggressive action.

Look up! It is a vision that awakens and quickens and inspires. It is outlook that calls forth impulse and simplifies power and vitalizes faith.

Work up! The notion that youth is the only time to learn died long ago. The teacher who holds a first grade certificate is simply a little better prepared to learn than the one who holds a second or third grade—that is all.

Keep up! It is not enough to work up; you ought to keep up also. No matter what your attainments may be, you will quickly fall behind if you slacken effort.

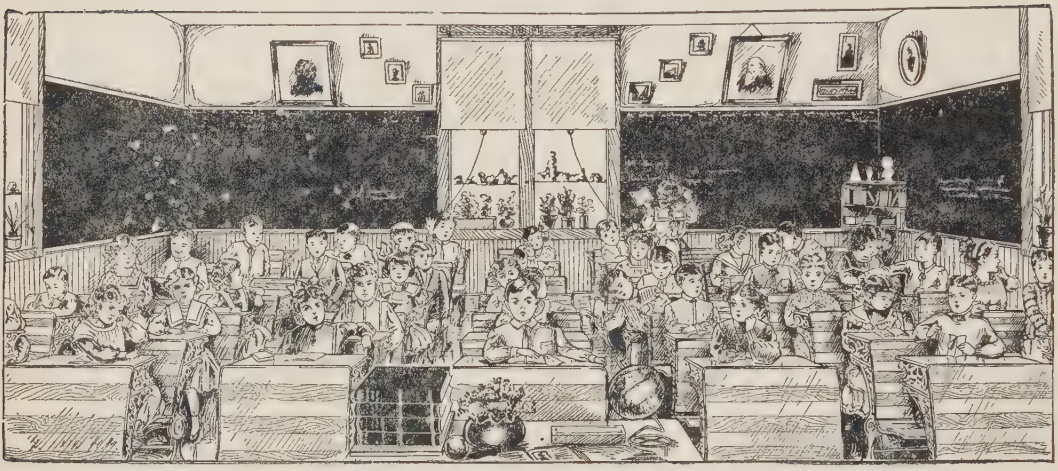
Note. "Three things you need to succeed: Learning, piety, and common sense. If you lack the first, go to college and use good books; if the second, pray earnestly to God for it; if you lack the third, neither man nor God can help you."

Such was the suggestion of an old Scotch divine to a candidate for the ministry. It needs little modification to apply to the teacher.

Dont's.

Don't stand too near the class.
Don't take hold of a pupil to put him in line.
Don't censure trifling errors severely.
Don't complain or grumble.
Don't criticise the teacher who preceded you.
Don't, as a rule, sit while teaching.
Don't give commands when you might give suggestions.
Don't show temper in dealing with parents.
Don't dispute with an angry parent before the school.
Don't make spiteful remarks about parents.
Don't try to teach without good order.

Don't suppose the children like to have their own way. They like to be governed.
Don't try to drown noise by a greater noise.
Don't call for order in general terms.
Don't be strict to-day and lax to-morrow.
Don't force children to sit long in the same position.
Don't punish without explanation.
Don't allow whispering.
Don't punish by pulling ears or slapping.
Don't question in rotation.
Don't repeat a question for the inattentive.
Don't try to teach too much in one lesson.
Don't be satisfied with partial answers.



FRONT VIEW OF A MODEL SCHOOLROOM.

Don't talk too much.
Don't think when you have told your pupils something you have TAUGHT them something.
Don't tempt pupils by the self-reporting system.
Don't fail to get acquainted with the people in the district, particularly the members of the school board.
Don't fail to devise some sort of exercise occasionally to bring out and interest the parents.
Don't arouse the emotional nature of sensitive children too much.
Don't fall into the habit of repeating answers. Occasional repetition for a purpose is allowable.
Don't be satisfied with one correction of an error.
Don't fail to drill and review systematically upon the important matters you have tried to teach.
Don't forget that it is your business to TEACH as well as to hear pupils recite lessons.
Don't forget that teaching and governing a school is a difficult art, which requires study and painstaking effort.
Don't fail to encourage your pupils to do their best.
Don't drive if you can lead.
Don't let your school run away with you. GOVERN THE SCHOOL WHATEVER YOU DO OR FAIL TO DO.

Don't forget that the best way to govern is to GIVE PUPILS PLENTY OF INTERESTING AND PROFITABLE WORK TO DO. The teacher who succeeds in working up an abiding interest in study will have little trouble with discipline.

Don't fall into the habit of repeating "Quickly!" "Carefully!" "Quietly!"

CRITICISMS THAT ARE FREQUENTLY MADE BY THOSE WHO INSPECT COUNTRY SCHOOLS.

"The teacher does not make intelligent use of the common school manual."
"Pupils are not prepared for the work they are undertaking."
"The teacher is indifferent; lacks interest."
"The teacher spends too much time and exhausts her energies in attending parties."
"The teacher does not keep a neat and orderly desk."
"The teacher does not know how to explain difficulties."
"The teacher does not call school on time in the morning, at noon, or at recess."
"The teacher eagerly watches the clock and seems eager to get away."
"The teacher is slow and pokey."
"The teacher does not teach, but stands in a helpless way and lets the class exercise go on as best it may."
"The teacher is a poor writer and cannot stimulate the pupils to write well."
"The teacher is a poor reader and cannot help the pupils to acquire the art of reading in a pleasing and intelligent manner."
"The teacher fails to see or take notice of the disorder."
"The teacher has not a strong grip upon the school, but 'fights it out' every day as best she can."
"The people of the district are not interested in the school and the teacher does not know how to improve the school sentiment in the community."
"The teacher is timid, afraid of the pupils, the school board, and the patrons."
"The teacher lacks life and animation and the school is dead."
"The schoolroom is not decorated and looks dingy and forbidding."
"The outbuildings are in bad condition."
"The room is not properly heated, lighted, or ventilated."
"There is little or no apparatus."
"The library is not properly used or properly taken care of."
"The teacher does the janitor work and she does not do it well. The fire is not built in time to have it warm in the morning, the sweeping is not properly done, and the dusting is not properly attended to."
"The attendance is irregular and the pupils are frequently tardy."
"The teacher takes no pains in assigning lessons."
"There are too many recitations in the daily program."
"The teacher does not stimulate thought."

SOME OF THE MORE IMPORTANT QUESTIONS AN INSPECTOR OR SUPERINTENDENT WILL ASK HIMSELF AND ANSWER FROM OBSERVATION WHEN HE VISITS YOUR SCHOOL.

1. Are the pupils at their seats studying or otherwise properly employed?
2. Are they at work in a vigorous manner, sitting in good position and seemingly enjoying their work?
3. Are the pupils watching the teacher and taking advantage of every opportunity to engage in sly forms of disorder, such as whispering, note passing, throwing paper wads, changing seats, etc.?
4. Do pupils find frequent excuse for getting up and moving about the schoolroom?
5. Are pupils loud and boisterous in the schoolroom when dismissed or at recess?

6. Are the recitations for the older pupils vigorous, thinking exercises, combined with suitable drill exercises? Are the recitations for the younger pupils animated and bright?
7. Do the pupils seem to enjoy the recitation or do they appear listless and bored?
8. Does the teacher hold the close attention of all her pupils during every recitation?
9. Which does she seem to get hold of best in the class exercises, the older or the younger children? How is this fact to be accounted for?
10. Does the teacher seem alert, vigorous, self-poised, competent? If not, is the failure due to lack of health, lack of nourishment, lack of sleep, lack of interest, lack of knowledge, lack of training?
11. Does she seem well prepared on every recitation she attempts to hear?
12. Has she a good program which she follows? Has she a study program for pupils to follow?
13. Does the teacher keep the records properly?
14. Does she study individual pupils so as to know what they are most interested in and what their ambitions are?
15. Does she get to school in good season every day, and call school promptly in the morning, noon, and at recess?
16. Does she "keep in" to a marked extent?
17. What are her favorite modes of punishment? Are they satisfactory modes?
18. Is her schoolroom neat, orderly, homelike?
19. Is her clothing clean, neat, and orderly?
20. Does she adapt her work to the children's needs?
21. Does she criticise faulty work intelligently and in a manner to impress the children?
22. Does she illustrate the lessons in a simple, effective way?
23. Does she SHOW pupils to do what they lack skill in doing? Does she explain the difficult points in the lesson in such manner as to make it simple for the children to grasp?
24. Does she assign lessons with painstaking care, but without waste of time?
25. Does she talk too much or too little?
26. Is her manner bright and enthusiastic or cold and heavy?
27. What is her greatest strength? Her greatest shortcoming?
28. Are the outbuildings clean?

Education in Literature.

'Tis education forms the common mind,
Just as the twig is bent, the tree's inclined.
—*Pope.*

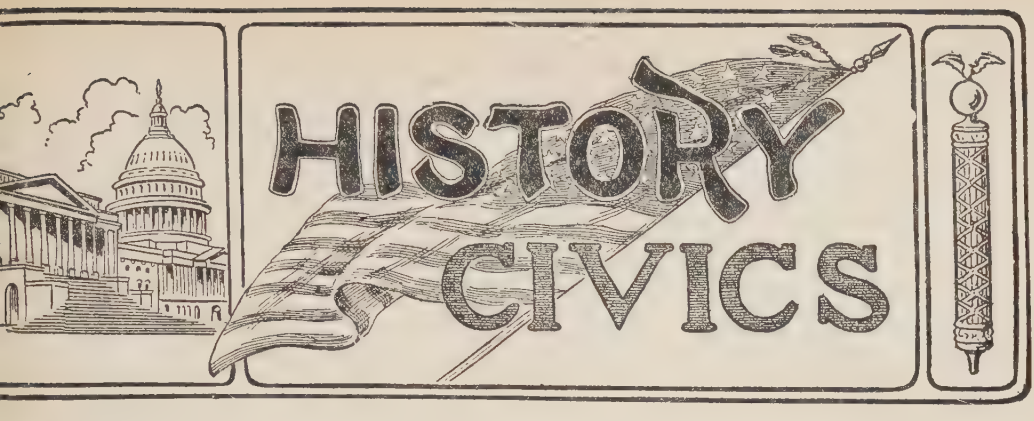
Learning by study must be won
'Twas ne'er entailed from sire to son.
—*Gay.*

How empty learning, and how vain is art,
But as it mends the life, and guides the heart!
—*Young.*

Knowledge is proud that he has learned so much;
Wisdom is humble that he knows no more.
—*Cowper.*

Eternal smiles his emptiness betray,
As shallow streams run dimpling all the way.
—*Pope.*

It is a good divine that follows his
Own instructions; I can easier teach twenty
What were good to be done, than be one
Of the twenty to follow mine own teaching;
The brain may devise laws for the blood; but
A hot temper leaps o'er a cold decree.
—*Shakespeare.*



HISTORY embraces the entire story of the development of man from the dawn of life to the present time. In its general aspect it is closely related to anthropology (q. v.), which is defined as the science of man and mankind.

These outlines and this work of general reference treat all historical topics of general interest. They consider history, not only as a subject of study, but treat it in its relation to science and literature. This form of treatment enables the student to obtain the greatest amount of help, not only from the standpoint of historical reading, but also by coming in touch with the essence of historical facts and prominent men and women in the development of nations and institutions.

The articles treating of the nations, states, and provinces contain subheads designated as *History*, in which numerous references are made to the achievements that belong particularly to the titles under which they appear. All the more important historical topics, such as ALABAMA CLAIMS, BLACK FRIDAY, HOME RULE, LONG PARLIAMENT, REFORMATION, SUCCESSION WARS, etc., are treated in special articles. The history of Canada and the United States is referred to in almost every historical article related to modern times.

CORRELATED SUBJECTS.

Alabama Claims
Alexander the Great
Anthropology
Ashburton Treaty
Attila
Aztecs
Babylonish Captivity
Basel, Council of
Bible
Bill of Attainder
Christianity
Civilization
Civil War
Cleopatra
Confederate States
Constantine the Great
Constitution
Crédit Mobilier
Crusades
Egyptology
Ethnology
Far Eastern Question
Feudalism
Folklore
Frederick the Great
French Revolution
God
Goths
Gunpowder
Hannibal
Hanseatic League
Heraldry
Hieroglyphics
Holy Alliance
Holy Roman Empire
Huguenots
Income Tax
Indians
International Law
Jews
Koran
Languages
Literature
Louisiana Purchase
Magna Charta
Man
Mohammedanism
Money
Mythology
Papal States
Pharisees
Political Parties
Parliament
Plebeians
Pragmatic Sanction
Reconstruction
Religion
Renaissance
Revolution
Romulus
Rosetta Stone
Saracen
Seven Years' War

Shay's Rebellion.
Slavery
Succession Wars
Talmud
Tariff
Thirty Years' War
Troy
Underground Railroad
Vandals
War
William the Conqueror
Witchcraft
York, House of
X Y Z Correspondence
Zollverein

Questions in History.

Define history and biography.

What is meant by organized society?

Define a nation, a race, a people.

Mention some of the sources of history.

Why is the subject of geography important to a study of history?

Why are prehistoric times divided into the Stone Age, the Age of Bronze, and the Age of Iron?

Define chronology and tell why it is important in the study of history.

Classify the Tartars, the Egyptians, the Persians, the Romans, the Germans.

Compare the history of civilized nations with the history of uncivilized nations.

Speak of the relative value of intellectual, industrial, and religious development in the growth of civilization.

Define folklore and mythology.

Mention the names of two Roman, two German, two English, and two American historians.

From and to what periods do ancient, medieval, and modern history extend?

Write a thesis on the *Philosophy of History*.

Chronological History.

Part I.—Ancient History.

FROM 8000 B. C. TO 476 A. D.

Dawn of History (about 8000 years before the birth of Christ).

6000. Civilization and industry thrived in Babylonia.

5000. First Egyptian Dynasty, beginning with Menes.

4000-1500. Assyria subject to the kings of Babylonia.

3800. Sargon I., the oldest Chaldean king.

3000. The Aryan migration to the valley of the Indus.

3000. Chinese nation came into the basin of the Yellow River from the west.

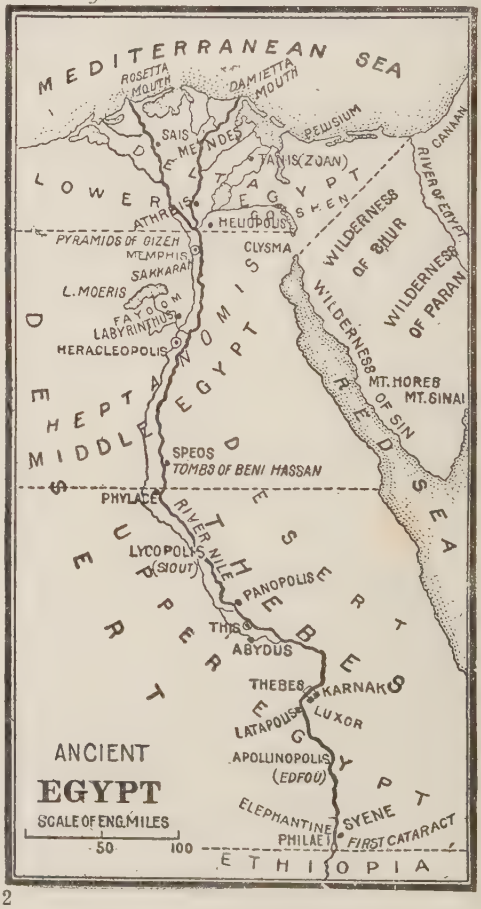
1300. Chaldea surpassed by Assyria.

1300. Exodus of Israelites from Egypt.

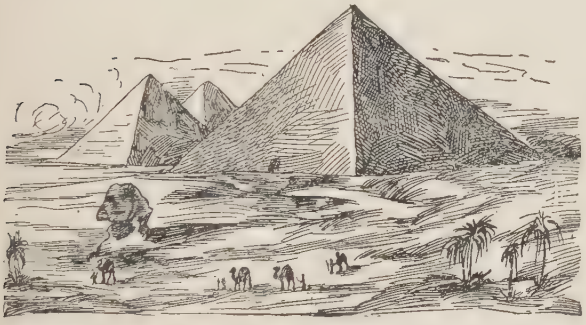
1015. Reign of Solomon and building of the temple.

1010. David, King of Israel, made Jerusalem the capital.

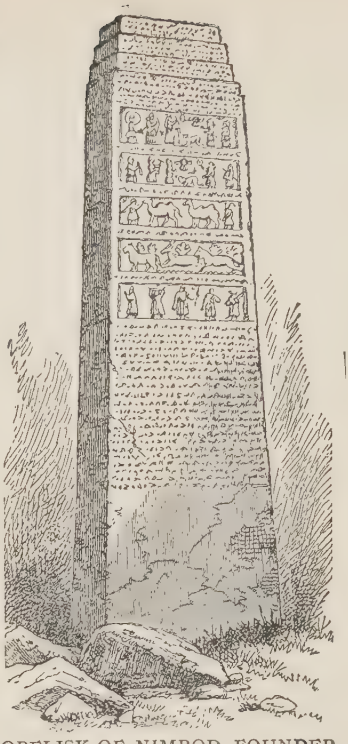
975. Division of the kingdom into Israel and Judah.



722. Sargon, one of the great conquerors and builders of Assyria, carried the Ten Tribes into captivity.
705. Sennecherib came to the throne of Assyria.
604. Nebuchadnezzar, King of Babylonia.
586. Nebuchadnezzar captured Jerusalem and virtually ended the separate political life of the Hebrew race.
558. Reign of Cyrus the Great, King of Persia, begins.
555. Fall of Babylon.
551. Birth of Confucius, the Chinese philosopher.
446. Herodotus in Athens.



PYRAMIDS AT GIZEH, EGYPT.



OBELISK OF NIMROD, FOUNDER OF BABYLONIA.

334. Overthrow of the Persian empire by Alexander the Great.
333. Beginning of the empire of the Ptolemies.
204. Great wall of China completed.

Greece.

1300. Kingdom of Mycenae in Greece at the height of its prosperity.
546-539. Cyrus, King of Persia, conquered the Greek cities of Asia Minor.
510. Constitutional reforms established at Athens by Clisthenes.
490. Battle of Marathon.
479. Battle of Plataea and Mycale, which victories by the Greeks concluded the Persian Invasion.
459. Age of Pericles begins. Citizens are taken into pay of the state, thus affording an equal distribution of political rights.
438. The Parthenon completed at Athens.
431. Peloponnesian War begins.

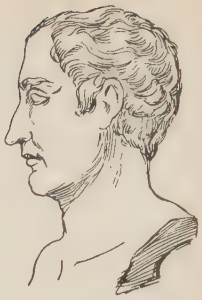
ALEXANDER THE GREAT.

404. { Surrender of Athens to the Spartans. / Beginning of Spartan supremacy.
401. Xenophon led the Retreat of the Ten Thousand.
399. Death of Socrates.
371. Theban supremacy.
336. Accession to the throne by Alexander the Great.
327. Alexander's conquest of India.
323. Death of Alexander at Babylon.
146. Defeat of the Greeks at Corinth; Greece became subject to Rome.

Rome.

753. Legendary date of the founding of Rome.
390. Sack of Rome by the Gauls, and the city made a heap of ruins.

367. Plebeians admitted to the Consulship.
264. First Punic War between Rome and Carthage.
255. Regulus defeated in Africa by the Carthaginians.
218. Second Punic War; Hannibal crossed the Alps.
202. Hannibal defeated by Scipio in the Battle of Zama.
149-146. Third Punic War. Carthage became a Roman province.
59. Caesar made Consul and the first Triumvirate formed by Caesar, Crassus, and Pompey.
44. Assassination of Caesar by Cassius, Brutus, and other conspirators.
31. Battle of Actium and the defeat of Antony.



CAESAR.

CHRISTIAN ERA.

4 B. C. Jesus Christ is born.
9 A. D. Arminius, the German leader, defeated the Romans under Varus.
31. Christ is crucified under Pilate, the Roman procurator.
47. Britain subdued by the Romans.
64. Reign of Nero; Rome burned.
115. Roman Empire reached its greatest extent, Trajan being emperor.
306-337. Reign of Constantine the Great; the empire became Christian. Conversion of the Goths, Vandals, and other peoples to Christianity.
395. Final division of the Roman empire, by Theodosius, into that of the East and that of the West.
400. Invasion of Italy by the Germans.
410. Sack of Rome by Alaric.
During the 5th century the Teutonic or German races seized the western provinces of the Roman Empire, and began the wonderful migrations which spread their race over England, France, and Spain.
451. Battle of Chalons, by which Attila was driven back across the Rhine and Europe was saved for the Teutons.
476. Fall of the Roman Empire in the West.
527. Justinian, Emperor of the Eastern Empire, codified the Roman law, which is the foundation of modern jurisprudence.

Part II.—Medieval History.

FROM 476 A. D. TO 1492 A. D.

476-1100. Dark Ages.
572. Kingdom of the Lombards formed in Italy.
596. Conversion of the Anglo-Saxons in Britain through the efforts of Saint Augustine and his Monks.
622. Flight (Hegira) of Mohammed from Mecca to Medina, beginning the epoch of Mohammedan chronology.
664. Council of Whitby, by which the Celtic Church was absorbed by the Roman Church, and that Church became the ecclesiastical ruler of England, Scotland, and Ireland.
610-641. Reign of Heraclius. During this reign the glory of the second Persian empire was overthrown at the Battle of Nineveh, in 627. (b) The empire became Greek.
732. Battle of Tours, in France, by which the Saracens were driven back by the Christianized Germans of Europe and Europe was saved to Christianity.
780. Irene became famous as the empress of Byzantium.
1100-1500. Age of the Revival of Learning.
1453. Capture of Constantinople by Mohammed II., Sultan of the Ottomans, or Turks, and the overthrow of the Eastern Empire.

Charlemagne and the Restoration of the Empire in the West.

CHARLEMAGNE.

752. Pepin, son of Charles Martel, became the first King of France.
755. Beginning of the temporal power of the popes; the Papal States formed.
768-814. Reign of Charlemagne.

Northmen and the Conquest of England.

900. Invasion and partial conquest of England by the Danes, or Northmen.
918. Rollo, leader of the Northmen, obtained from Charles, King of France, a section of country in Gaul, which afterward became Normandy, and they were known subsequently as Normans.
1066. Norman conquest of England by William, Duke of Normandy.

1096-1272. CRUSADES.
1438. Invention of printing.

England.

1215. Magna Charta, first check on absolute government.
1265. Beginning of the House of Commons.
1282. Conquest of Wales.
1314. Battle of Bannockburn, and independence of Scotland for 300 years.
1324. Wycliffe and the English Reformation.
1336. Beginning of the Hundred Years' War between England and France.
1415. Henry V. defeated the French at Agincourt.
1455-1485. Wars of the Roses.

France.

987-996. Hugh Capet, king. The kingdom of France really begins.
1302. Creation of the States-General, which marks the admission of the Commons to the Feudal Assembly of France.
1473. Louis XI. began a war against the feudatory princes, who were defeated in a contest of nearly five years.

Spain.

1479. Union of Castile and Aragon, the beginning of modern Spain.
1492. Conquest of Granada and the overthrow of the Moors.

Beginnings of Germany.

962. Renewal of the Roman Empire by Otto the Great, a German king.
1388. Rise of the Swiss republic.
1415. John Huss burned at the stake.

Part III.—Modern History.

FROM 1492 TO THE PRESENT TIME.

1492. Discovery of America.
Dominion of the Moors in Spain terminated.
1497-1498. Voyage of Vasco da Gama to the East Indies around the coast of Africa.
1519-1522. Voyage of Magellan around the world.
Conquest of Mexico by the Spaniards.

Reformation in Germany.

1483-1546. Martin Luther, the Protestant reformer.
1491. Birth of Loyola, the founder of the Jesuits.
1519. John Calvin, reformer of Geneva.
1520. Burning of the Papal bull by Luther.
1555. Peace of Augsburg concluded the war between the Catholics and Lutherans.

MARTIN LUTHER.

Spain—(Continued).

1519-1556. Emperor Charles V. wars with German Protestants.
1556. Abdication of Emperor Charles and the crowning of his son, Phillip II.
1571. Phillip's crusade against the Moors and his defeat of the Turkish fleet at Lepanto.
1588. Spanish Armada sent by him against England.

England—(Continued).

1485-1603. Tudor kings of England. (b) Union of the Houses of Lancaster and York by the defeat of Richard on Bosworth Field.
1497. Cabot's discovery of the continent of America.
1534. Act of Supremacy, by which England, at the request of Henry VIII., was separated from the Church of Rome.
1558-1603. Reign of Queen Elizabeth.
1587. Mary, Queen of Scots, was beheaded.

QUEEN ELIZABETH.

Rise of the Dutch Republic.

1515-1555. Low Countries under Charles V. His persecution of the Protestants.
1579. Union of Utrecht, by which the seven Protestant States of the North were confederated as the Seven United Provinces of the Netherlands. William of Orange was the animating spirit of the confederacy.
1584. Assassination of the Prince of Orange at the instigation of the Spaniards.
1648. Peace of Westphalia, by which Spain formally acknowledged the independence of the Netherlands.

France—(Continued).

1562-1629. Huguenot wars in France.
1572. Massacre of Saint Bartholomew's Day.
1589. Henry of Bourbon, King of Navarre, became King of France.
1598. Edict of Nantes, which granted freedom of worship to the Huguenots.

Thirty Years' War.

1618-1648. Thirty Years' War, which was the last great combat between the Protestants and Catholics in Europe.
1632. Gustavus Adolphus, King of Sweden, defeated Wallenstein at the Battle of Lutzen.
1648. Treaty of Westphalia, which practically closed the religious wars.

France—(Continued).

1643. Accession of Louis XIV., who stands as the representative of absolute monarchy.
1648 Civil wars of the Fronde.
1685. Revocation of the Edict of Nantes.
1715. Death of Louis XIV.
1754. French and Indian War in America begins.

England Under the Stuarts.

1603-1714. Reign of the Stuarts.
1610. Completion of King James's version of the Bible.
1628. Petition of Right.
1640. Long Parliament.
1642-1649. Civil war.
1644. Scots defeated the English under Prince Rupert at Marston Moor.
1649. Charles I. beheaded by Parliament.
1649-1660. Commonwealth, with Cromwell as its guiding spirit, and the Puritans in control.
1660. Restoration of the Stuart kings.
1660-1685. Charles II.
1666. Great fire of London.
1685-1688. James II.
1688. The Revolution.
1689. Bill of Rights, check on royalty.
1702-1714. Queen Anne.
1760. Accession of George III.
1775. American Revolution.
1782. Legislative independence of Ireland.
1783. Peace of Paris. Independence of the United Colonies of America acknowledged by England.

Rise of Russia.

1654. Revolt of the Cossacks against Poland.
1682. Accession of Peter the Great, the real founder of Russia.
1772. Partition of Poland by Russia, Prussia, and Austria.
1792. Second partition of Poland by the same nations.
1795. End of the Polish kingdom by the final partition.

Rise of Prussia.

1611. Union of the Electorate of Brandenburg and the Duchy of Prussia, by which the foundation of the Prussian kingdom was laid.

MARIA THERESA.

1640-1688. Frederick William.
1701. Frederick III., son of Frederick William, was crowned as the first King of Prussia at Königsberg.
1740-1786. Frederick the Great.
1748. Treaty of Aix la Chapelle ends the War of the Austrian Succession.
1756. Beginning of the Seven Years' War.
1814. German Confederation established.
1815. Defeat of Napoleon by Blücher and Wellington.

France—(Continued).

1789-1799. French Revolution; destruction of the Bastille.
1793-1794. Reign of Terror.
1795. Napoleon defended the Convention.

1799. Napoleon overthrew the Directory and became the First Consul of France.
1804. Napoleon proclaimed Emperor.

NAPOLEON BONAPARTE.

1811. Napoleon at the summit of his power.
1813. Battle of the Nations (Leipsic).
1814. Abdication of Napoleon.
1815. Napoleon began the *Hundred Days' Campaign.*
June 18th. Waterloo.
Louis XVIII. placed upon the throne of France.
1830. The Revolution.
1848. Second Republic.
1852-1870. Second Empire.
1870. Napoleon III. declared war against Germany.
1871. Third Republic; Thiers elected president.
1894. Assassination of President Sadi-Carnot.
1900. Paris Universal International Exposition.
1910. The public schools were neutralized from the direct influence of the church.

Russia—(Continued).

1801-1825. Alexander I. and the Holy Alliance.
1828-1829. The Russo-Turkish War.
1853-1856. Crimean War.
1858. Emancipation of the serfs.
1877-1878. Russo-Turkish War.
1904. War with Japan; Port Arthur surrendered.
1905. Treaty of Portsmouth closes the war; a constitution granted in all the Russias.
1917. Monarchy overthrown; Soviet government established.

Modern Germany.

1815. Formation of the German Confederation.
1864. Schleswig-Holstein War.
1866. Seven Weeks' War between Austria and Prussia.
1867. Establishment of the North German Union.
1870-1871. Franco-Prussian War.
1871. Establishment of the German Empire.
1888. Accession of William II. to the throne.
1902. Dribund of Germany, Italy, and Austria-Hungary renewed.
1905. Dispute with France over the occupation of Morocco.
1918. Emperor William II. forced to abdicate; Germany became a republic.

WILLIAM I.

Italy.

1830-1831. The Revolution.
1848-1849. The Revolution.
1859-1860. Austro-Sardinian War.
1860. Sicily and Naples added to Victor Emmanuel's kingdom.
1870. Rome became the capital.
1893. Campaign against the Dervishes in Africa.
1900. Victor Emmanuel succeeded to the throne.
1905. Completion of the Simplon Tunnel between Italy and Switzerland

GEORGE V.

1828. Disabilities removed from Protestants.
1829. Disabilities removed from Catholics.
1832. Reform Bill.
1837. Victoria ascended the throne.
1840-1842. Opium War with China.
1854-1856. Crimean War.
1867. Reform Bill.
1869. Disestablishment of the Irish Church.
1884. Reform Bill.
1898. Death of William E. Gladstone.
1899. Anglo-Boer War.
1902. Edward VII. ascended the throne.
1903. Irish Land Bill, providing for the sale of estates to tenants, instead of rents, passed by Parliament.
1910. George V. succeeded to the throne.

Sovereigns of England.

ANGLO-SAXON LINE.

Alfred, King of Wessex.....871-901
Edward I., King of Wessex...901-925
Athelstan, King of England...925-940
Edmund I.....940-946
Edred 946-955
Edwy 955-959
Edgar 959-975
Edward II.....975-978
Ethelred 978-1016
Edmund II.....1016-1017

DANISH LINE.

Canute 1017-1036
Harold I.....1036-1039
Hardicanute 1039-1041

SAXON LINE.

Edward III.....1041-1066
Harold II.....1066-....

NORMAN LINE.

William I.....1066-1087
William II.....1087-1100
Henry I. 1100-1135

HOUSE OF BLOIS.

Stephen 1135-1154

HOUSE OF PLANTAGENET.

Henry II.....1154-1189
Richard I.....1189-1199
John 1199-1216
Henry III.....1216-1272
Edward I.....1272-1307
Edward II.....1307-1327
Edward III.....1327-1377
Richard II.....1377-1399

HOUSE OF LANCASTER.

Henry IV.....1399-1413
Henry V.....1413-1422
Henry VI.....1422-1461

HOUSE OF YORK.

Edward IV.....1461-1483
Edward V.....1483-....
Richard III.....1483-1485

HOUSE OF TUDOR.

Henry VII.....1485-1509
Henry VIII.....1509-1547
Edward VI.....1547-1553
Mary 1553-1558
Elizabeth 1558-1603

HOUSE OF STUART.

James I.....1603-1625
Charles I.....1625-1649

COMMONWEALTH.

Oliver Cromwell.....1649-1658
Richard Cromwell.....1658-1660

HOUSE OF STUART.

Charles II.....1660-1685
James II.....1685-1688

HOUSE OF ORANGE.

William III. and Mary II....1688-1702

HOUSE OF STUART.

Anne 1702-1714

HOUSE OF HANOVER.

George I. 1714-1727
George II. 1727-1760
George III. 1760-1820
George IV. 1820-1830
William IV. 1830-1837
Victoria 1837-1901
Edward VII. 1901-1910
George V. .....1910-....

Topical Study of United States History.

FIVE PERIODS.

I. Aboriginal Period 1492
II. Voyage and Discovery ..... 1492 to 1607
III. Colonial Development ..... 1607 to 1775
IV. Revolutionary Period ..... 1775 to 1789
V. National Period ..... 1789 to the Present Time

I. Aboriginal Period.

The Aborigines.

I. MOUND BUILDERS.
- 1. Earthworks.
  - *a.* Where found.
  - *b.* Number.
  - *c.* Shapes and sizes.
  - *d.* Contents.
  - *e.* Purposes.
- 2. Time and origin.

II. INDIANS (See page 138).
- 1. Time and origin.
- 2. Number.
- 3. Character and habits.
- 4. Language.
- 5. Government.
- 6. Religion.
- 7. Tribes.

Discovery of America by the Northmen.

I. TIME. } Biarne Herjulfson 986
II. PERSONS. } Lief Eric 1001

III. CAUSES.

Herjulfson, sailing from Iceland to Greenland, was driven by a storm westward; he reported that he saw land, and Lief Eric determined to test the truth of this report.

IV. PLACES.

Labrador and the northeast coast of the United States. Some authorities claim the entire Atlantic coast was explored.

V. EVIDENCES.

The annals of Iceland and the traditions of the Northmen.

VI. RESULTS.

Nothing permanent. The country was named Vinland. Frequent voyages were made from Europe in the 12th, 13th, and 14th centuries.

In 1350 a plague depopulated Greenland and Iceland and all communication with the latter country ceased.

II. Period of Voyage and Discovery.

I. Christopher Columbus.
- (a) Birth.
- (b) Parentage.
- (c) Education.
- (d) Marriage.
- (e) Voyages.
- (f) Character.
- (g) Death.
- (h) Burial.

II. Discovery of America.
- (a) Time.
- (b) Persons.
- (c) Place.
- (d) Causes.
- (e) Hindrances.
- (f) Results.

Spanish Explorers and Discoverers.

1492. Columbus.
1499. Vespucci.
1512. Ponce de León.
1513. Balboa.
1517. Cordova.
1518. Grijalva.
1519-21. Cortez.
1519-21. Magellan.
1520. De Ayllon.
1528 Narváez.
1539-42. De Soto.
1531-36. Pizarro.
1540. Coronado.
1542. Cabrillo.
1565. Menéndez.

VESSEL OF THE NORTHMEN

SHIPS OF COLUMBUS
(The Nina, Pinta, and Santa Maria)

THE MAYFLOWER

INDIAN FAMILY

BLOCKHOUSE AT FORT DUQUESNE, PA.

INDIAN VILLAGE NEAR QUEBEC

MOUNDS AND EARTHWORKS NEAR MARIETTA, OHIO

English Explorers and Discoverers.

1497. John Cabot.
1498. Sebastian Cabot.
1576. Frobisher.
1579. Drake.
1579-83. Gilbert.
1584. Raleigh.
1584. Amidas and Barlow.
1585. Davis.
1586. Cavendish.
1587. White.
1602. Gosnold.
1603. Pring.
1605. Weymouth.

PERIOD OF VOYAGE AND DISCOVERY.

Dutch Explorers and Discoverers.

1609. Henry Hudson.
1614. Adrian Block.
1614. Cornelius May.
1614. Christianson.
1616. Baffin.

French Discoverers and Explorers.

1524. Verrazani
1535. Cartier.
1562. Coligny.
1562. Ribault.
1564. Laudonniere.
1605. De Monts.
1608. Champlain.

Portuguese Navigators.

1497. Vasco da Gama.
1500. Cabral.
1501. Cortereal.
1515. Magellan.

III. Colonial Development.

Settlement of Virginia.

OBJECT: Financial profit.

1606. London and Plymouth Companies.
1607. Settlement at Jamestown.
Sir Walter Raleigh.
Bartholomew Gosnold.
John Smith.
1609. Second Charter.
1609-10. The Starving Time.
1612. Third Charter.
Powhatan (Wahunsonacook).
1612. Cultivation of Tobacco.
1613. John Rolfe and Pocahontas.
1619. House of Burgesses.
1619. Introduction of Slavery.
1619. Importation of Women.
1621. Written Constitution Granted.
1622-44. Indian Massacres.
1660. Navigation Acts.
1673. Culpepper and Arlington.
1676. Bacon's Rebellion.
Bacon's Laws.
1676. Governor Berkeley.
1688. Establishment of Free Schools.
1692. College of William and Mary.
1698. Williamsburg made the Capital.

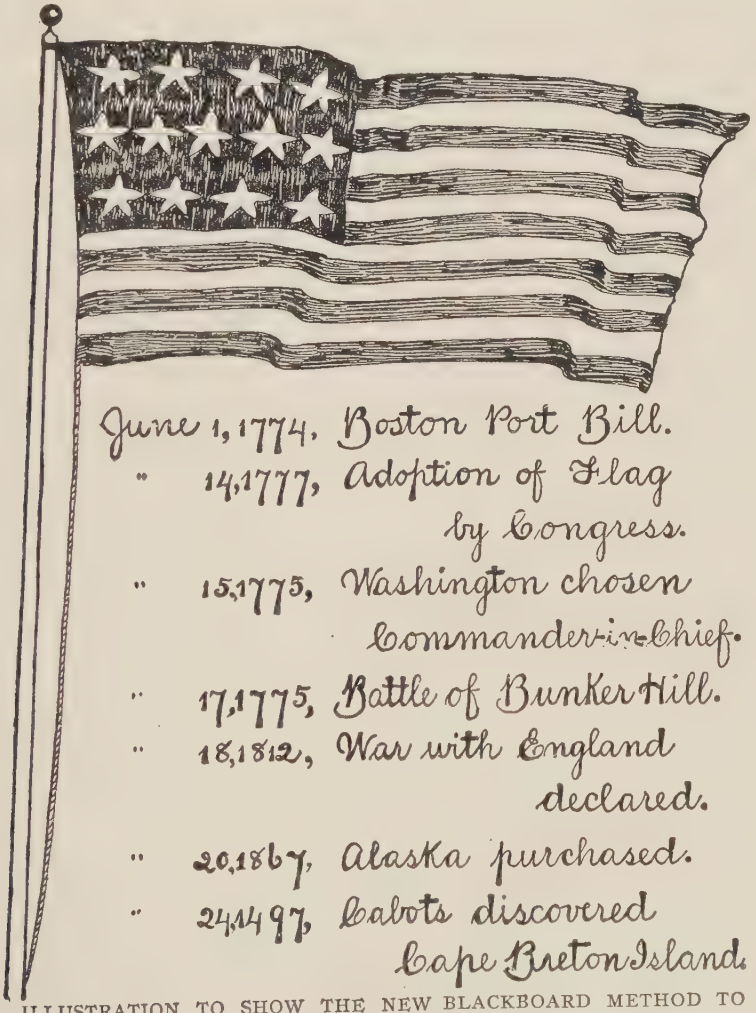

June 1, 1774, Boston Port Bill.
" 14, 1777, Adoption of Flag by Congress.
" 15, 1775, Washington chosen Commander-in-chief.
" 17, 1775, Battle of Bunker Hill.
" 18, 1812, War with England declared.
" 20, 1867, Alaska purchased.
" 24, 1497, Cabots discovered Cape Breton Island.

ILLUSTRATION TO SHOW THE NEW BLACKBOARD METHOD TO TEACH AND STUDY IMPORTANT DATES AND EVENTS IN HISTORY BY MONTHS

Settlement of New York.

OBJECT: The Colonists sought freedom from religious persecution. It was the object of the Dutch West India Company to hold the territory for Holland.

1614. New Amsterdam.
1614. Fort Orange.
1624. Peter Minuit.
1629. Arrival of the Patroons.
1633. Wouter Van Twiller, 1959.
1637. William Kieft.
1647. Peter Stuyvesant.
Location of New Netherlands.
Location of New Sweden.
1655. New Sweden conquered by the Dutch.
1664. Surrender to the English.
1664-7. Richard Nichols.
1667-73. Francis Lovelace.
1673. Dutch captured New York.
1674. New York taken by the English.
1689-92. Career of Leisler.
1697-9. Sir William Kidd.
1734. Freedom of the Press established.
1741. Negro Plot.

Settlement of Massachusetts.

OBJECT: To obtain greater religious and civil freedom. The king had given the Pilgrims assurance that they would not be molested. The Council for New England, which had secured a charter from the king, sent the first colony of Puritans.

1620. Plymouth Colony.
1628. Massachusetts Bay Colony.
Number and Character of Settlers.
Puritans, Pilgrims, and Separatists.
Miles Standish.
John Carver.
William Bradford.
John Endicott.
Massasoit and the Indians.
Salem Settlement.
1630. Boston founded.
1634. First use of the Ballot Box.
1636. Harvard College Founded.
1639. Printing Press.
1649. Free Schools Established.
1656. Persecution of Quakers.
1675. King Philip's War.
1692. Salem Witchcraft.
Roger Williams and Anne Hutchinson.
1643-83. League of Colonies in New England.
1692. Union of Colonies in Massachusetts.

Settlement of New Hampshire.

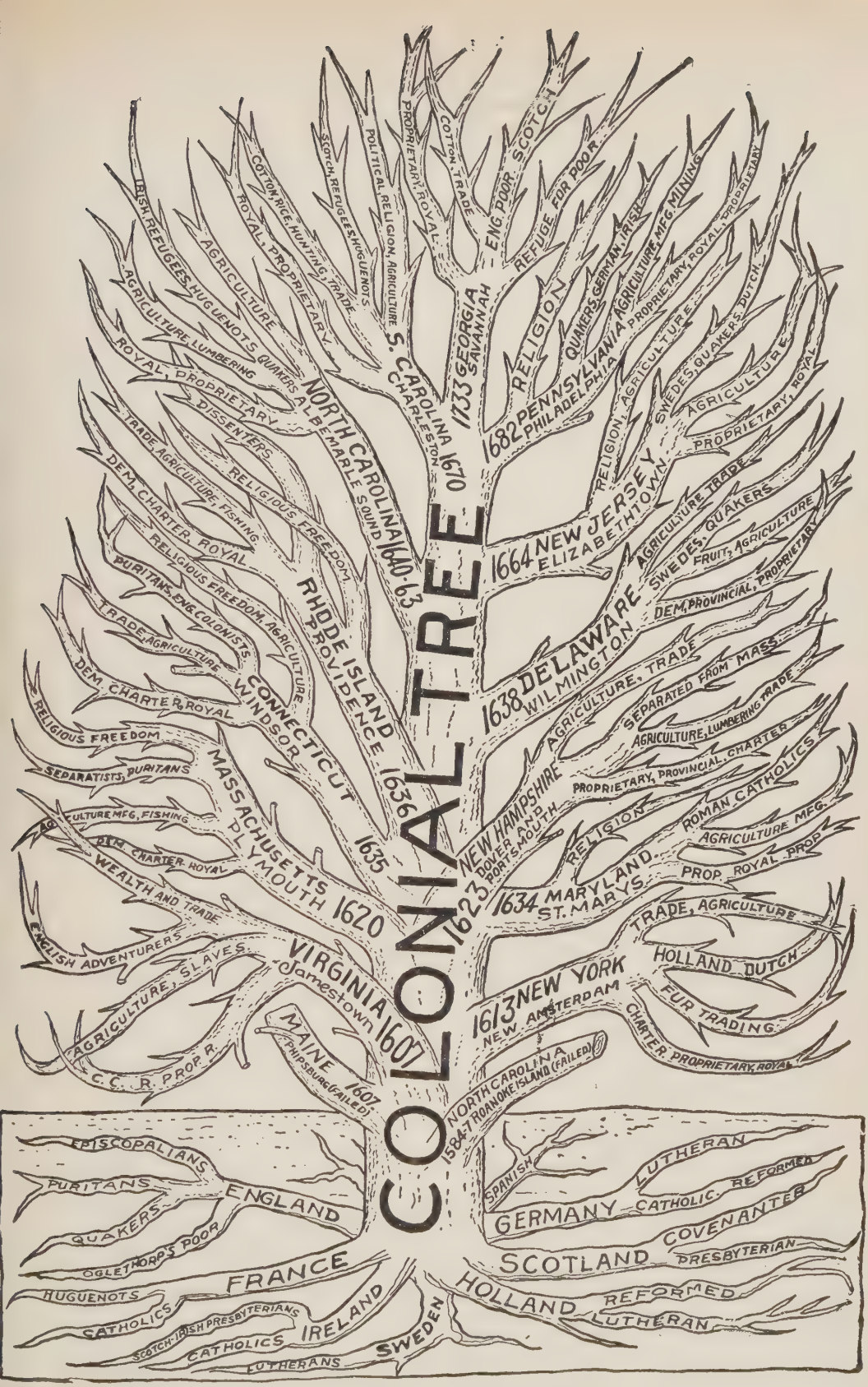
OBJECT: To promote trade.

1622. Mason and Gorges. 1942.
1623. Dover and Portsmouth.
1629. New Hampshire Grants. 1942.
1641. United with Massachusetts.
1769. Dartmouth College.
Dartmouth College Case. 755.
1775. Entered American Confederacy.
1780. Laconia Settled. 1528.

Settlement of Maryland.

OBJECT: To obtain religious liberty for persecuted Catholics.

1634. Settlement at Saint Mary's.
Cecil Calvert and Leonard Calvert.
Charter for Maryland.
1645. Clayborne's Rebellion.
1649. Toleration Act.
1655. The Civil War.
1691. Royal Government.
1715. Proprietary Charter.
1763-67. Mason and Dixon's Line.



ROOTS AND BRANCHES OF THE COLONIES.

Settlement of Connecticut.

OBJECT: To promote agriculture and have freedom in religious worship.

1631. Grant given to Lord Say and Sele.
1633. Dutch Settled at Hartford.
1635. Emigrants from Massachusetts. Saybrook Founded.
1637. Pequot War.
1638. New Haven.
1642. Establishment of a Free School.
1650. Dutch Relinquish Claims.
1687. Andros at Hartford.
1687-1856. Charter Oak.
1701. Yale College.
1708. Congregational Church was Established.

Settlement of Rhode Island.

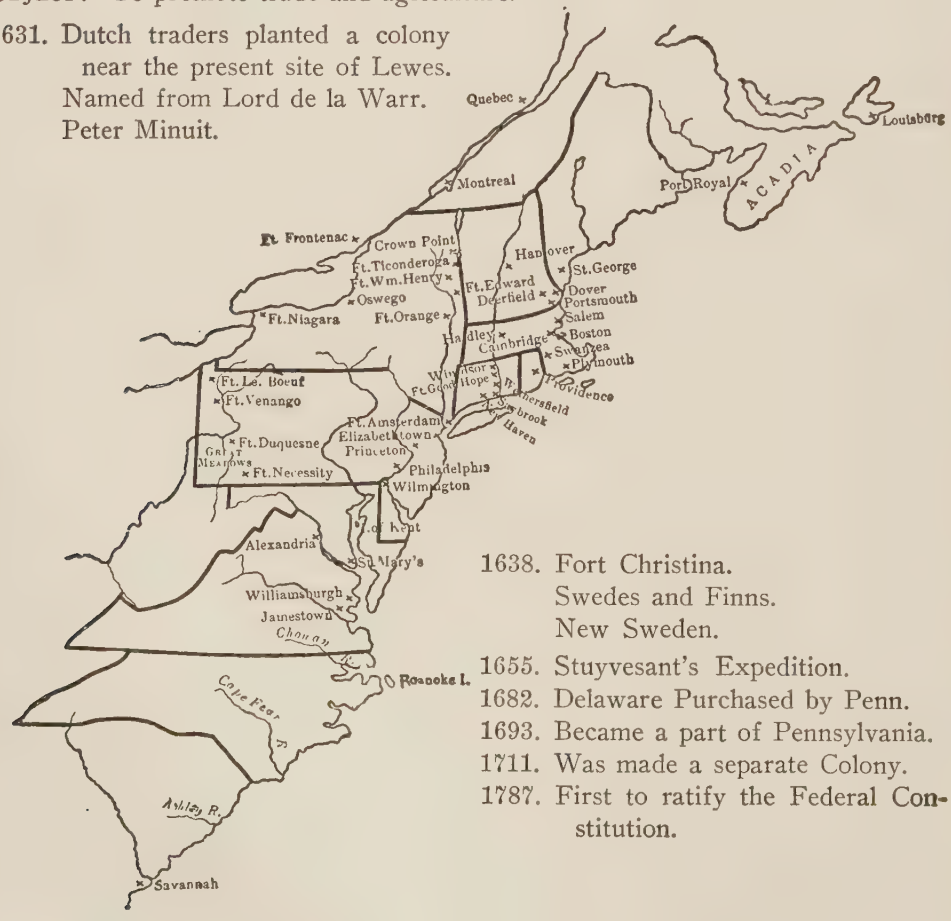
OBJECT: To obtain a separation of the Church from the State.

1636. Providence.
New England Immigrants.
Roger Williams.
1638. Newport.
William Coddington.
Anne Hutchinson.
1639. Baptist Church.
1643. First Charter.
1644. Union of Colonies.
1663. Second Charter.
1764. Brown University.
1790. National Constitution Ratified.

Settlement of Delaware.

OBJECT: To promote trade and agriculture.

1631. Dutch traders planted a colony near the present site of Lewes. Named from Lord de la Warr. Peter Minuit.



THIRTEEN COLONIES.

1638. Fort Christina.
Swedes and Finns.
New Sweden.
1655. Stuyvesant's Expedition.
1682. Delaware Purchased by Penn.
1693. Became a part of Pennsylvania.
1711. Was made a separate Colony.
1787. First to ratify the Federal Constitution.

Settlement of the Carolinas.

OBJECT: Both colonies were settled to develop agriculture and avoid political strife. The early settlers of South Carolina were likewise eager for greater religious freedom.

1562. French Protestants.
1584. Failure of Walter Raleigh.
1653. Roger Greene at Albemarle.
1670. Carteret Colony.
Barbadoes.
Old Charleston.
1670. The Grand Model.
1711. Indian Massacres.
1724. Divided into North and South Carolina.
1729. Royal Charter.

Settlement of New Jersey.

OBJECT: To develop agriculture.

1617. Dutch Settled at Bergen.
1623. English Built Fort at Camden.
Region Claimed by the Swedes.
1655. Governor Stuyvesant Conquered the Swedes.
1664. Elizabethtown.
Sir George Carteret.
Philip Carteret.
Lord Berkeley.
East Jersey.
West Jersey.
1682. William Penn Purchased East Jersey.
Covenanters or Cameronians.
1702. Two Colonies United.
1738. Royal Colony Established.

Settlement of Pennsylvania.

OBJECT: To obtain religious liberty.

1643. Swedes Settled at Chester.
1655. Conquered by the Dutch.
1681. Grant to William Penn.
1682. William Penn and English Quakers.
Philadelphia Founded by Penn.
Cottage of Penn. 2183.
1683. The Great Treaty.
1683-1810. Elm, where Penn made Treaty. 2183.
1763-1767. Mason and Dixon's Line.
1774. First Continental Congress.
1775. Second Continental Congress.

Settlement of Georgia.

OBJECT: To obtain a home for poor debtors and freedom for the Protestants.

1733. Savannah Settled.
James Oglethorpe.
Silk and Cotton.
German Protestants.
Restriction on Colony.
1735. Charles Wesley and John Wesley.
George Whitefield.
Founding of the Methodist Church.
Slavery and Rum.
1751. Royal Charter Granted.
1776. Supported the Revolution.

Missionaries.

I. Jesuit.
La Salle.
Marquette.
Hennepin.
Joliet.
Raille.

II. English.
John Eliot.
Thomas Mayhew.
Daniel Gookin.

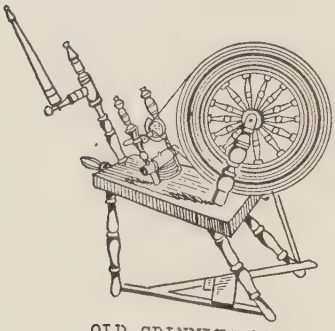
Forms of Colonial Government.

I. Royal Province or Provincial Government.
II. Charter Government.
III. Proprietary Government.
IV. Commercial Association.
V. Voluntary Association.

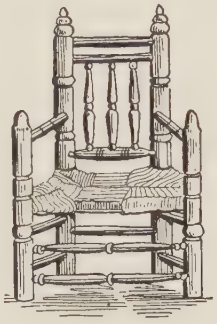
COSTUMES OF FRENCH SETTLERS

DUTCH SETTLERS

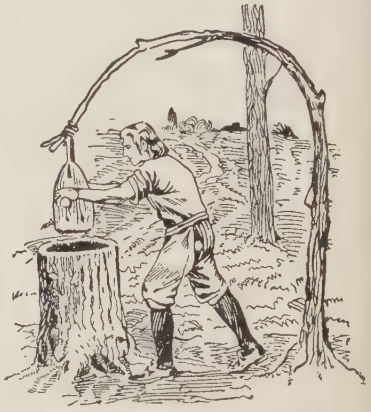
A QUAKER



OLD SPINNING-WHEEL

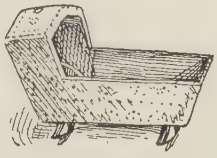


GOVERNOR CARVER'S CHAIR



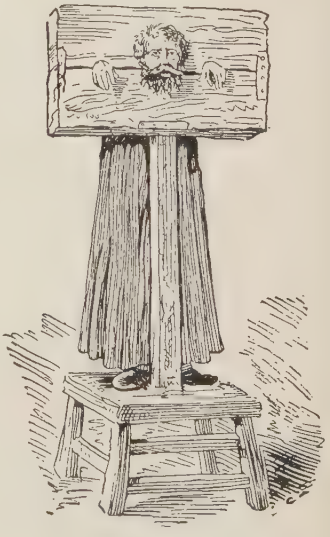
POUNDING CORN TO MAKE MEAL

PIONEER DWELLING



EARLY CRADLE

PURITANS GOING TO CHURCH



THE PILLORY

Intercolonial or French and Indian Wars.

King William's War.

1689 to 1697.

Causes of.
Attack on Schenectady.
Attack on Haverhill.
Capture of Acadia.
1697. Treaty of Ryswick.
Congress of the Northern Colonies.

Queen Anne's War, or the War of the Spanish Succession.

1702 to 1713.

Cause of.
Deerfield.
Port Royal or Annapolis.
Governor Moore.
Charlestown.
Nova Scotia.
1713. Treaty of Utrecht.

Spanish War.

1739 to 1744.

Causes of. Attack on Saint Augustine. Results of.

King George's War, or the War of the Austrian Succession.

1744 to 1748.

Cause of.
Burning of Canso.
1745. Capture of Louisburg.
James Wolfe. 1634.
Important Results.
1748. Treaty of Aix-la-Chapelle.

French and Indian War.

1754 to 1763.

Commanders in chief:
(a) English—
(1) Edward Braddock.
(2) William Shirley.
(3) Lord Loudon.
(4) Abercrombie.
(5) Jeffrey Amherst.
(b) French—
(1) Baron Dieskau.
(2) Marquis de Montcalm.
Causes of { 1. Remote. 2. Immediate.
The Ohio Company.
Washington's Journey.
Fort Duquesne.
Fort Necessity.
Great Meadows.
Albany Council.
Acadia.
Braddock's Defeat.
Braddock's Funeral Service.
Second Expedition Against Fort Duquesne.
Fort Niagara.
Fall of Quebec.
Pontiac's War.
Treaty of Paris.

Colonial and Continental Congresses.

I. Albany Council.

1754.

Place (Albany, N. Y.).
Proposition of—(A plan for the union of the colonies).
Treaty of—(Made a treaty with Indians).

II. First Colonial or Stamp-Act Congress.

Oct. 7, 1765.

Place (New York City).
Cause (Stamp Act).
Colonies Represented (9).
Declaration of Rights and Grievances.

III. Second Colonial or First Continental Congress.

Sept. 5, 1774.

Place (Philadelphia).
Cause (Opposition to England).
Number of Delegates (53).
Colony not Represented (Georgia).
Carpenter's Hall.
Measures Adopted.

IV. Second Continental Congress.

May 10, 1775.

Place (Philadelphia).
Cause (Battles of Lexington and Concord).
Petition.
Paper Money.
Commander in Chief of United States Army (George Washington).

V. Continental Congress of 1776.

Place (Philadelphia).
Declaration of Independence.
Committee sent to France.
Articles of Confederation.
The Main Provisions made by the Congresses of 1777, 1778, 1779 and 1780 were to carry on the war of the Revolution.

Thirteen Original Colonies in 1763.

Population.
Number of Slaves.
Largest Cities.
Area and Boundary.
Forms of Government.
Language.
Religion.
Slavery.
Trade.
Mode of Travel.
Postal Service.
Hospitality.
Laws.
Rights of Colonial Governors.
Education.
Literary Men.

Causes of the Revolutionary War.

1660. Navigation Act.
1733. Importation Act, Molasses Act or Sugar Act.
1761. Writs of Assistance.
1765. Stamp Act.
1765. First Colonial Congress.
1766. Declaratory Act.
1767. Townshend Act.
1768. Mutiny Act.
1770. Boston Massacre.
1773. Boston Tea Party.
1774. Boston Port Bill.
1774. First Continental Congress.
Taxation without Representation.
Influence of France on the Colonies.
Rulings of George III.
Right of Arbitrary Government.

IV. Revolutionary Period, 1775-1789.

War of the Revolution.

1775 to 1783.

Commanders in Chief:
(a) English—
1. Thomas Gage.
2. Sir William Howe.
3. Sir Henry Clinton.
4. Sir Guy Carleton.
(b) American—
1. George Washington.

Events of 1775.

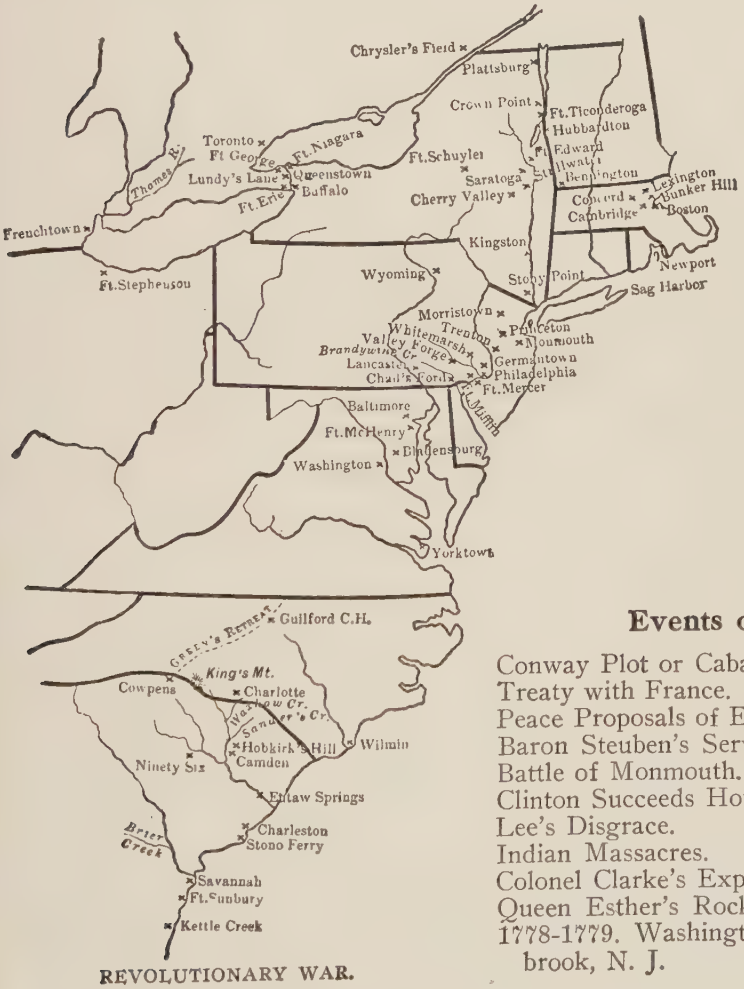
Battle of Lexington.
Ticonderoga and Crown Point.
Second Continental Congress.
Battle of Bunker Hill.
Gage's Proclamation.
Mecklenburg Resolutions.
Battle of Quebec. 2350.
1775-1776. Siege of Boston.

Events of 1776.

Fort Moultrie.
Lee's Resolution.
Declaration of Independence.
Hessian Allies.
Tories, Loyalists, or Royalists.
Patriots or Whigs.
Battle of Long Island.
Washington's Retreat.
Nathan Hale.
Battle of White Plains.
Battle of Trenton.
Franklin, Deane, and Lee.

Events of 1777.

Washington at Morristown.
Continental Bills.
Need of Money.
Robert Morris.
Victory at Princeton.
Burgoyne's Expedition.
Battle of Bennington.
Battle of Brandywine.
Battle of Germantown.
First Battle of Saratoga.
Second Battle of Saratoga.
The Stars and Stripes.
Morgan's "Sharpshooters."
Turning Point of the Revolution (Battle of Saratoga).
Acceptance of Articles of Confederation by Congress.
1777-78. Washington at Valley Forge, Pa.



REVOLUTIONARY WAR.

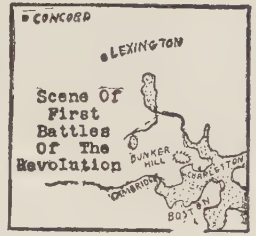
Events of 1778.

Conway Plot or Cabal.
Treaty with France.
Peace Proposals of England.
Baron Steuben's Services.
Battle of Monmouth.
Clinton Succeeds Howe.
Lee's Disgrace.
Indian Massacres.
Colonel Clarke's Expedition.
Queen Esther's Rock.
1778-1779. Washington at Middlebrook, N. J.

1775 LEXINGTON AND CONCORD

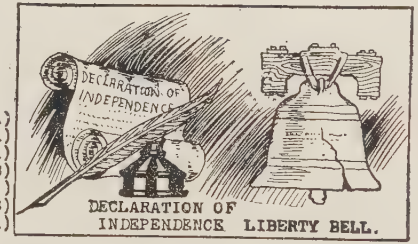
Apr. 19, Lexington and Concord (A)
May 10, Ticonderoga Taken (A)
May 12, Crown Point Taken (A)
June 17, Bunker Hill Battle (B)
Nov. 13, Montreal Captured (A)
Dec. 31, Assault on Quebec (B)
TROOPS ENLISTED - 37,363

RIDE OF PAUL REVERE



1776 INDEPENDENCE

July 4, Declared Independence
Mch. 4, Dorchester Heights (A)
Mch. 17, Boston Evacuated (A)
June 28, Fort Moultrie (A)
Aug. 27, Long Island (B)
Oct. 28, White Plains (I)
Nov. 16, Fort Washington (B)
Dec. 26, Trenton (A)
TROOPS ENLISTED - 84,761

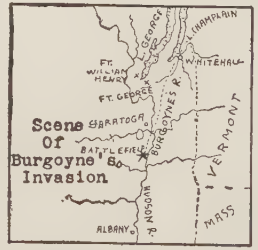


DECLARATION OF INDEPENDENCE LIBERTY BELL.

1777 BURGOYNE'S SURRENDER

Oct. 17, Surrender (A)
Jan. 3, Battle of Trenton (A)
April 26, Danbury Burned (B)
Aug. 16, Bennington (A)
Sept. 11, Brandywine (B)
Sept. 19, Bemis Heights (I)
Oct. 4, Germantown (B)
Nov. 16-18, Fort Mercer (B)
TROOPS ENLISTED - 68,720

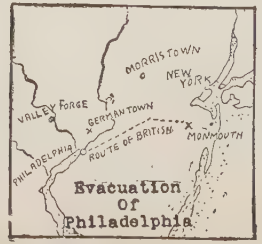
BATTLE OF SARATOGA



1778 EVACUATION OF PHILADELPHIA

June 18, Evacuation of Philadelphia (A)
Feb. 6, French Alliance (A)
June 28, Battle of Monmouth (A)
July 3-4, Wyoming Massacre (B)
Aug. 29, Newport (A)
Nov. 10, Cherry Massacre (B)
Dec. 29, Savannah Taken (B)
TROOPS ENLISTED - 51,046

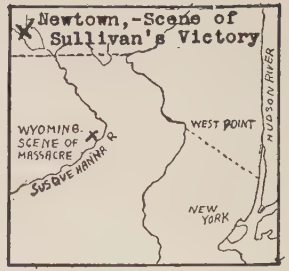
EVACUATION OF PHILADELPHIA



1779 RETRIBUTION

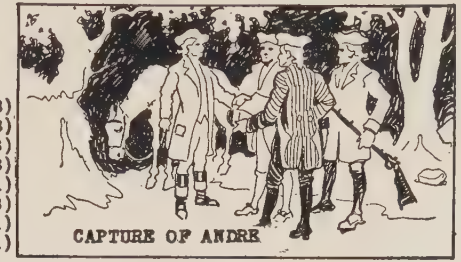
Aug. 29, PUNISHMENT OF INDIANS (A)
Feb. 14, Kettle Creek (A)
Feb. 25, Vincennes Taken (A)
Mch. 3, Briar Creek (B)
July 16, Stony Point (A)
Sept. 23, Paul Jones' Victory (A)
Oct. 9, Savannah Taken (B)
TROOPS ENLISTED - 44,275

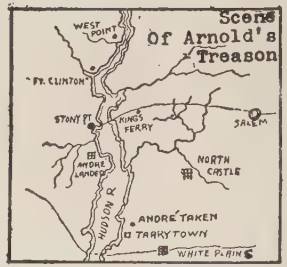
SULLIVAN DEFEATS THE IROQUOIS



1780 TREASON OF ARNOLD

Sept. 23, (B)
Apr. 14, Monk's Corner (B)
May 12, Charleston Captured (B)
May 29, Waxhaw Creek (B)
Aug. 6, Hanging Rock (A)
Aug. 16, Battle of Camden (B)
Oct. 7, King's Mountain (A)
Nov. 20, Blackstock (A)
TROOPS ENLISTED - 43,079

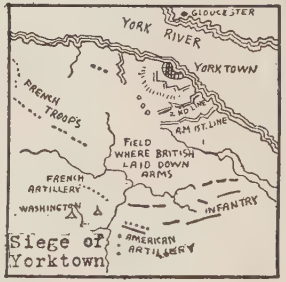

CAPTURE OF ANDRE



1781 YORKTOWN SURRENDER

Oct. 19, (A)
Jan. 17, Battle of Cowpens (A)
Mch. 15, Guilford Courthouse (B)
Apr. 25, Hobkirk's Hill (B)
Apr. 26, Fort Watson (A)
Sept. 6, New London Burned (B)
Sept. 8, Eutaw Springs (I)
TROOPS ENLISTED - 29,340

SURRENDER OF CORNWALLIS



LIBERTY, which is taken as the key word to study the events of the Revolution in America, should be kept in mind by the student and those who need to use historical facts at a moment's notice. It introduces the period by enabling us to recall Lexington and the Ride of Paul Revere and serves as a reminder of the great turning points of that period, ending with the surrender of Cornwallis at Yorktown.

Events of 1779.

British Army in the South.
Movements in South Carolina.
Capture of Stony Point.
Poor Richard and the *Serapis.*

Events of 1780.

Fall of Charleston.
Partisan Warfare in the South.
Hanging Rock.
Battle of Camden.
King's Mountain.
Arnold's Treason.
1780-81. Army at Morristown, N. J.

Events of 1781.

Mutiny.
Greene's Retreat Through South Carolina.
Battle at Cowpens.
Greene at Steel's Tavern.
The Catawba, Yadkin and Dan Rivers.
Guilford Court House.
Hobkirk's Hill.
Eutaw Springs.
Siege of Yorktown.
Surrender of Cornwallis.

Miscellaneous Topics.

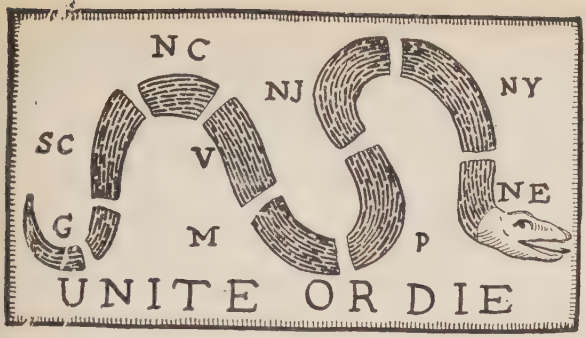
1782. George III's Speech on United States.
Sons of Liberty.
Daughters of Liberty.
1783. Treaty of Versailles or Paris.
1783. Boundary of United States.
Cost of Revolutionary War—
a. England.
b. United States.
Cradle of Liberty.
Five Intolerable Acts.
Minutemen.
Father of the Revolution.
Shay's Rebellion.
Paul Revere's Ride.
Green Mountain Boys.
The Ship of State.
Virginia and Connecticut Reserves.
Ordinance of 1787.
The Gerrymander.
The Third Term Tradition.
Sanitary and Christian Commissions.
Sheridan's Ride.
The Owenite Communities.
Blue Lodges.
The Brownists.
Congress Lottery.
Starved Rock.
Ticket Money.
Western Reserve. 1996.
Virginia Military District. 1996.

Articles of Confederation.

When framed by Congress? (1776-1777.)
When adopted by the States? (1777-1781.)
When in force? (March 1, 1781.)
When and how did the colonies become States?
Nature of Government?
Leading Defects—
a. No taxing power.
b. No power to regulate trade.
Issue of Paper Money.
Legal Tender Acts.
Amendments proposed?
Why not amended?
Attempts of States to Regulate Trade.
Trade Convention of Annapolis. (1786.)

Constitutional Convention.

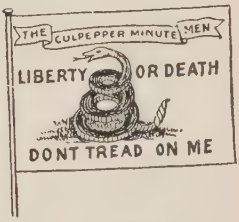
Time. (May 14 to Sept. 17, 1787.)
Place. (Independence Hall, Philadelphia.)
Number of members. (55.)
Father of the Constitution. (James Madison.)
President of the Convention. (Washington.)
The Virginia and New Jersey plans.
Adoption of Virginia plan.
Adoption of the Constitution. (Sept. 17, 1787.)
First and last states to adopt it. (Delaware and Rhode Island.)
The New Roof. (Constitution so called by the Federalists.)



DEVICE SUGGESTING UNION IN THE REVOLUTION

SAINT JOHN'S CHURCH, RICHMOND, VA.

BRITISH HELMET, SWORD, AND GUN



VIRGINIA MINUTEMEN'S FLAG

FAST MAIL IN 1776

RATTLESNAKE FLAG

OLD NORTH CHURCH, BOSTON

STAGE BETWEEN NEW YORK AND PHILADELPHIA

PINE-TREE FLAG

INDEPENDENCE HALL, PHILADELPHIA, IN 1776

VIEWS TAKEN FROM THE REVOLUTIONARY PERIOD.

History Studied by the Administrations

V. National Period.

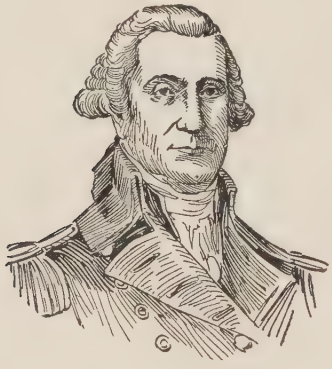
1789 to Present Time.

1789 to 1797.

GEORGE WASHINGTON of Virginia, President.

JOHN ADAMS of Massachusetts, Vice President.

Politics of the Administration (Federal).



GEORGE WASHINGTON.

1789. Inauguration (April 30).
1789. Washington's Cabinet.
1789. Chancellor Livingston.
1789-1791. First Ten Amendments, or Bill of Rights.
1790. First Census: Population, 3,229,-219.
1790. Death of Franklin.
1790. National Capital.
1791. United States Bank.
1791. Vermont Admitted.
1792. United States Mint.
1792. Free Coinage.
1792. Admission of Kentucky.
1793. Citizen Genet.
1793. First Cotton Gin.
1794. Whiskey Insurrection.
1795. Jay's Treaty with England.
1795-1798. Federal Money.
1795. Treaty with Algeria.
1796. Change of Naturalization Period to five years.
1796. Admission of Tennessee.
1796. Political Parties and Candidates.
(a) Federal, John Adams and Thomas Pinckney.
(b) Anti-Federal, Thomas Jefferson and Aaron Burr.
Issue, Jay's Treaty with England.

1797 to 1801.

JOHN ADAMS of Massachusetts, President.

THOMAS JEFFERSON of Virginia, Vice President.

Politics of the Administration (Federal).

JOHN ADAMS.

1798. X Y Z Papers.
1798. Department of Navy established.
1798-1800. Trouble with France.
1798. Alien and Sedition Laws.
1798. Kentucky Resolutions.
1798. National Song.
1798. Eleventh Amendment.

"PROVIDENCE

WASHINGTON

LEFT Whiskey Insurrection

HIM admission of Kentucky Tennessee and Vermont

CHILDLESS, eat of Government Established

THAT amilton's Financial Policy.

HIS ndian troubles in North-west Territory.

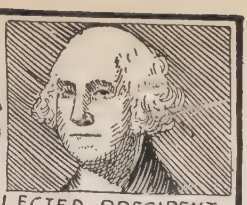
COUNTRY ational Bank Established

MIGHT enet the French Minister.

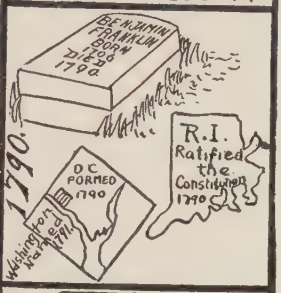
CALL reaties with England Spain and Algiers

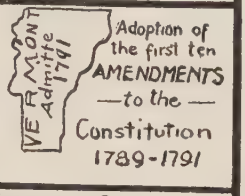
HIM ations on the English Treaty.

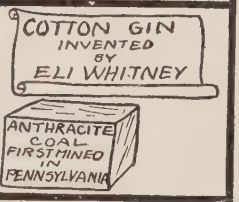
FATHER" ew Political Parties.

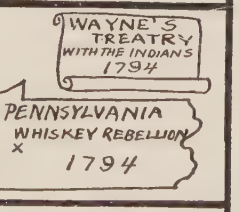


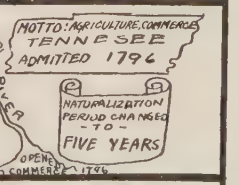
1789 ELECTED PRESIDENT.

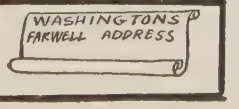












EXECUTIVE DEPARTMENT

PRESIDENT	WASHINGTON.
VICE PRESIDENT	JOHN ADAMS
SECRETARY OF STATE	JEFFERSON, RANDOLPH, PICKERING.
SECRETARY OF TREAS.	HAMITON, WOLCOTT
SECRETARY OF WAR	KNOX, PICKERING, Mc HENRY.
POST MASTER GENERAL	OSGOOD, PICKERING, HABERSHAM
ATTORNEY GENERAL	RANDOLPH, BRATFORD, LEE

LEGISLATIVE DEP'T.

PRESIDENT OF SENATE	ADAMS
SPEAKER OF HOUSE	MUHLENBERG. TRUMBULL, DAYTON.
NUMBER OF MEMBERS	SENATE 26, HOUSE 65
LEADERS	MADISON, GERRY
LAWS:	REVENUE BILL, NATURALIZATION BILL

JUDICIAL-DEPARTMENT

CHIEF JUSTICES AND ASSOCIATE JUSTICES OF THE SUPREME COURT.	JAY, RUTLEGE, ELSWORTH, WILSON, BLAIR, HARRISON, IREDEL, JOHNSON, PATTERSON, CHASE

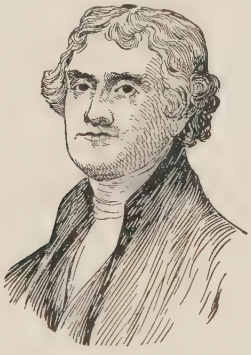
IMPORTANT EVENTS.

TREATIES	TREATY WITH ENGLAND, TREATY WITH SPAIN
SLAVERY	
STATES ADMITTED	VERMONT, KENTUCKY, TENNESSEE
DEATHS	PUTNAM (1790), FRANKLIN (1790), JONES (1792)
WARS	INDIAN, WHISKEY REBELLION
INVENTIONS	COTTON GIN, NAIL CUTTER
MISCELLANEOUS	FIRST U.S. CENSUS, CAPITOL REMOVED, COINAGE OF MONEY
FOREIGN AFFAIRS	FRENCH REVOLUTION

1798. Stamp Tax.
1798. Naturalization Period made fourteen years.
1798. Fries's Rebellion.
1799. Virginia Resolutions.
1799. Death of Washington.
1800. Removal of the Capital.
1800. Second Census: Population, 5,308,483.
1800. Political Parties and Candidates.
(a) Democrat, Thomas Jefferson and Aaron Burr.
(b) Federal, John Adams and Charles C. Pinckney.
Issue, Alien and Sedition Laws.

1801 to 1809.

THOMAS JEFFERSON of Virginia, President.
AARON BURR, GEORGE CLINTON of New York, Vice Presidents.
Politics of the Administration (Democrat).

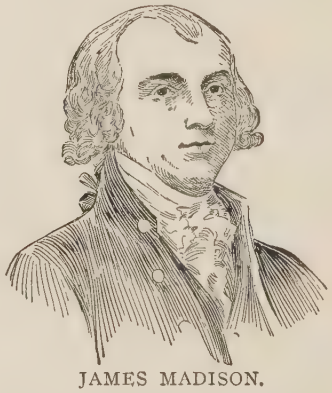


THOMAS JEFFERSON.

1801. Introduction of President's Message.
1801-5. Tripolitan War.
1802. Naturalization Period reduced to five years.
1802. United States Military Academy established at West Point.
1803. Purchase of Louisiana.
1803. Admission of Ohio.
1804. Twelfth Amendment.
1804. Lewis and Clark's Expedition.
1804. Hamilton-Burr Duel.
1806. Orders in Council, } or French
1806. Milan Decree, } and English
1806. Berlin Decree, } blockades.
1806. Pike's Peak.
1807. Burr tried for Treason.
1807. Fulton's Invention.
1807. Embargo Act.
1807. Importation Act.
1807. *Chesapeake* and *Leopard*.
1808. Oregon Country.
Slave Trade Prohibited.
1809. Non-Intercourse Act.
1808. Political Parties and Candidates.
(a) Democrat, James Madison and George Clinton.
(b) Federal, Charles C. Pinckney and Rufus King.
Issues, The War with England and the Embargo Act.

1809 to 1817.

JAMES MADISON of Virginia, President.
GEORGE CLINTON of New York, and ELBRIDGE GERRY of Massachusetts, Vice Presidents.
Politics of the Administration (Democrat).
1809. Macon Bill.
Trade with Great Britain.
Napoleon's Deception.
1810. Third Census: Population, 7,239,881.
1811. Tecumseh's Conspiracy.
1811. Tippecanoe.
1812. Admission of Louisiana.
1812. Causes and Declaration of War of 1812.
1812. Detroit surrendered to the English
1812. *Constitution* and *Guerriere*.
1812. *Wasp* and *Frolic*.
1812. *Hornet* and *Peacock*.
1812. *Chesapeake* and *Shannon*.



JAMES MADISON.

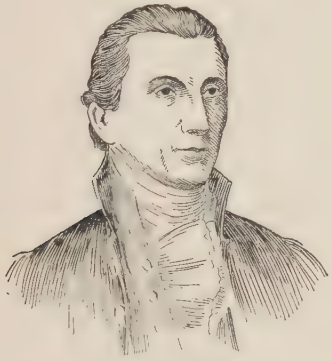
1813. Lake Erie.
1813. Creek War.
1814. Battle of Chippewa.
1814. Lundy's Lane.
1814. Burning of Washington.

1814. Fort McHenry.
1814. *The Star Spangled Banner.*
1814. McDonough's Victory.
1814. Hartford Convention.
1814. Treaty of Ghent.
1815. New Orleans Victory.
1816. Admission of Indiana.
1816. Second National Bank chartered.
1816. Political Parties and Candidates.
(a) Republican, James Monroe and D. D. Tompkins.
(b) Federal, Rufus King.* (No candidate for vice president.)
Issue, None distinctly defined.

*The Federalists voted for Rufus King but made no nominations.

1817 to 1825.

JAMES MONROE of Virginia, President.
D. D. TOMPKINS of New York, Vice President.
Politics of the Administration (Democrat).

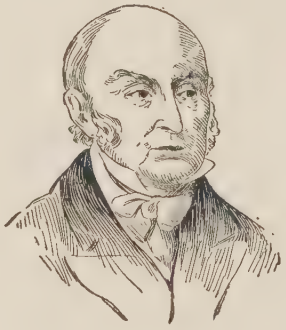


JAMES MONROE.

1817. First Seminole War.
1817. Monroe's Journey North.
1817. Mississippi Admitted.
Slavery Question in the North and South.
1818. Joint Occupation of Oregon.
1818. Canadian Boundary.
1818. Admission of Illinois.
1819. Purchase of Florida.
1819. Alabama became a State.
1820. Missouri Compromise.
1820. Second Election of Monroe.
Fourth Census: Population, 9,633,822.
1820. Maine admitted.
1821. Admission of Missouri.
1823. Monroe Doctrine.
Era of Good Feeling.
Pension Laws.
1824. Protective Tariff.
1824. Lafayette's visit to the United States.
1824. Political Parties and Candidates.
(a) Democrat.
(b) National Republican.
Candidates for President—Andrew Jackson, Henry Clay, John Quincy Adams and W. H. Crawford.
John C. Calhoun for Vice President.
Issue, None distinctly defined.

1825 to 1829.

JOHN QUINCY ADAMS of Massachusetts, President.
JOHN C. CALHOUN of South Carolina, Vice President.
Politics of the Administration (National Republican).
1825. Bunker Hill Monument.
1825. Erie Canal.
1826. American Society for Promotion of Temperance.
1826. Death of Jefferson and Adams (July 4).
1826. William Morgan's Book.
1827. Organization of Anti-Masonic Party.
1827. First Railroad.
Growth of Railroads in United States.
The Portage Railroad.
1828. Tariff Revision.
1828. Webster's Dictionary.



JOHN QUINCY ADAMS.

1828. Political Parties and Candidates.
(a) Democrat, Andrew Jackson and John C. Calhoun.
(b) National Republican, John Quincy Adams and Richard Rush.
Issues, Tariff and National Bank Questions.

1829 to 1837.

ANDREW JACKSON of Tennessee, President.
JOHN C. CALHOUN of South Carolina, MARTIN VAN BUREN of New York, Vice Presidents.
Politics of the Administration (Democrat).

ANDREW JACKSON.

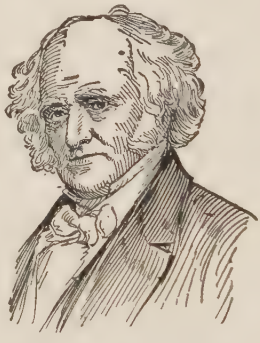
1829. Kitchen Cabinet.
Rotation in Office and Political Revolution.
Spoils System established.
1829. Postmaster-General given seat in Cabinet.
1829. Civil Service Changes.
1830. First Mormon Church.
1830. Fifth Census: Population, 12,866,020.
1830. First National Nominating Convention.
1832. First Party Platform.
1832. Webster-Hayne Debate.
W. L. Garrison and *The Liberator.*
1832. Tariff Legislation.
1832. Black Hawk War.
1832. Thomas Benton and United States Bank.
1833. Nullification Act of South Carolina.
1833. Compromise Tariff.
1833. Chicago organized as a Town.
1834. Indian Territory organized.
1835-43. Second Seminole War.
1835. New York Fire.
1836. Washington Fire.
1836. Admission of Arkansas.
1836. Specie Circular.
1836-44. Gag Rule.
1837. Admission of Michigan.
Pocket Vetoes of Jackson.
Pet and Wildcat State Banks.
Speculation Period.
1837. Division of Surplus Revenue.
1836. Political Parties and Candidates.
(a) Democrat, Martin Van Buren and R. M. Johnson.
(b) Whig, William Henry Harrison, and Francis Granger.
Issue, National Bank Question.

A nominating convention was not held in 1836 by the Whig party, but the several states named William Henry Harrison, Daniel Webster and W. P. Mangum as candidates for President, and John Tyler, Francis Granger, and John McLean as candidates for Vice President.

1837 to 1841.

MARTIN VAN BUREN of New York, President.
RICHARD M. JOHNSON of Kentucky, Vice President.
Politics of the Administration (Democrat).

1837. Financial Panic and its Causes.
Canadian Rebellion.
Magnetic Telegraph patented.
Steamer *Caroline.*
1839. Washingtonian Society organized.
1840. Organization of Liberty Party.
1840. Sixth Census: Population, 17,069,453.



MARTIN VAN BUREN.

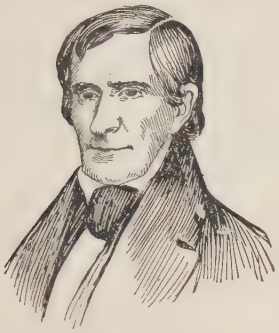
1830-47. Mormon Discussion.
1840. Sub-Treasury Bill.
Location of Chief Treasury.
Locations of Sub-Treasuries.
Antislavery Movements.
1840. Political Parties and Candidates.
(a) Whig, William Henry Harrison and John Tyler.
(b) Democrat, Martin Van Buren and R. M. Johnson.
(c) Liberty, J. G. Birney and Francis Lemoyne.
Issues, Protective Tariff and National Bank.

1841 to 1845.

WILLIAM H. HARRISON of Ohio, President (One month).

JOHN TYLER of Virginia, Vice President.

Politics of the Administration (Whig).



WILLIAM H. HARRISON.

1840-1850. Immigrants to United States.

1840. Whig Party Doctrine.

1840. Democratic Party Doctrine.

1841. Death of Harrison.
Tyler's Veto of the National Bank Bill.

1842. Dorr's Rebellion.

1842. Webster-Ashburton Treaty.
Tyler and the Whig Congress.
Resignation of the Cabinet.

1843. Dedication of Bunker Hill Monument.

JOHN TYLER.

1844. Electric Telegraph.

1844. First Message by Telegraph.

1844. First Treaty with China.

1845. Antirent Riots in New York.

1845. Annexation of Texas.

1845. Admission of Texas.
Bankrupt Law.
Florida Admitted.

1844. Political Parties and Candidates.
(a) Democrat, James K. Polk and George M. Dallas.
(b) Whig, Henry Clay and Theodore Frelinghuysen.
(c) Liberty, James G. Birney and Thomas Morris.
Issue, Annexation of Texas.

1845 to 1849.

JAMES K. POLK of Tennessee, President.

GEORGE M. DALLAS of Pennsylvania, Vice President.

Politics of the Administration (Democrat).

1845. Oregon Question.
Marcus Whitman.
Fifty-four Forty or Fight.
Settlement of Northwestern Boundary of United States.

JAMES K. POLK.

1846-48. Mexican War.

1846. Wilmot Proviso.

1846. Admission of Iowa.

1846. Suspension Bridge.

1846. Sewing Machine.

1846. Bear State Republic.

1846. Great American Desert.

1846. The Virginia Portion of District of Columbia receded to Virginia.

1846. Independent Treasury Bill.

1846. Hoe's Printing Press.

1848. Discovery of Gold in California.

1848. Free Soil party.

1848. Admission of Wisconsin.

1849. Department of Interior created (March 3).
Salt Lake City founded.

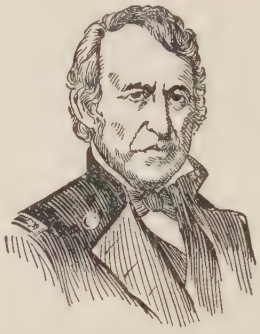
1848. Political Parties and Candidates.
(a) Whig, Zachary Taylor and Millard Fillmore.
(b) Democrat, Lewis Cass and W. O. Butler.
(c) Free Soil, Martin Van Buren and Charles Francis Adams.
Issue, Slavery was the leading issue, but the Whigs and Democrats made no particular issue.

MEXICAN WAR, 1846 to 1848.

Causes—
(a) Real (Annexation of Texas).
(b) Immediate (The boundary line between Texas and Mexico).
Generals in Chief—
(a) American { Zachary Taylor / Winfield Scott.
(b) Mexican—Santa Anna.
Declaration of War by United States (May 13, 1846).
Declaration of War by Mexico (May 23, 1846).
1846. Palo Alto (May 8).
1846. Resaca de la Palma (May 9).
1846. Monterey (Sept. 24).
1847. Buena Vista (Feb. 23).
1847. Vera Cruz (Mar. 27).
1847. Cerro Gordo (April 18).
1847. Pueblo (May 15).
1847. City of Mexico (Sept. 14).
1848. Guadalupe Hidalgo (Feb. 2).
1848. Political Parties and Candidates.
(a) Whig, Zachary Taylor and Millard Fillmore.
(b) Democrat, Lewis Cass and William O. Butler.
(c) Free Soil, Martin Van Buren and Charles Francis Adams.
Issue, Slavery Question, but the Whigs and Democrats did not declare themselves positively upon it.

1849 to 1853.

ZACHARY TAYLOR of Louisiana, President (Sixteen months).
MILLARD FILLMORE of New York, Vice President.
Politics of the Administration (Whig).
1850. Extension of Slavery.
1850. Death of the President.
1850. Omnibus Bill.
1850. Seventh Census: Population, 23,191,876.



ZACHARY TAYLOR.

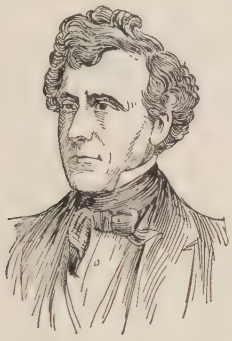
1850. Admission of California.
1850. Fugitive Slave Law.
1850. Squatter Sovereignty.
1850. Personal Liberty Laws.
1850. Importation of Slaves in District of Columbia.
Underground Railroad.

MILLARD FILLMORE.

1851. Maine Law passed.
1851. Filibusters.
1852. Death of Clay and Webster.
1852. Uncle Tom's Cabin.
1852. Political Parties and Candidates.
(a) Democrat, Franklin Pierce and W. R. King.
(b) Whig, Winfield Scott and W. A. Graham.
(c) Free Soil, J. P. Hale and G. W. Julian.
Issue, No special issue; for both the Democrat and the Whig parties considered the Slavery question settled since 1850.

1853 to 1857.

FRANKLIN PIERCE of New Hampshire, President.
WILLIAM R. KING of Alabama, Vice President.
Politics of the Administration (Democrat).



FRANKLIN PIERCE.

1853. World's Fair in New York City.
1853. Crystal Palace.
1853. Gadsden Purchase.
1853. Death of the Vice President.
1853. Union Pacific Railroad.
1853. Know-Nothing or American Party.
1854. Perry's Treaty with Japan.
1854. Kansas-Nebraska Bill.
1854. Ostend Manifesto.
1854-61. Civil War in Kansas. Border Ruffians, Abolitionists, Black Republicans.
1856. Organization of Republican Party.
1856. Brooks Assaults Sumner.
1856. Silver Grays.
1856. Political Parties and Candidates.
(a) Democrat, James Buchanan and J. C. Breckinridge.
(b) Republican, John C. Frémont and W. L. Dayton.
(c) Know-Nothing,* Millard Fillmore and A. J. Donelson.
Issue, Extension of Slavery.

*In 1856 the Whigs ratified the nominations of the Know-Nothing Party.

1857 to 1861.

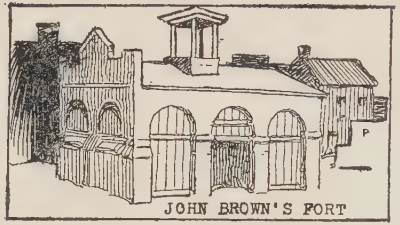
JAMES BUCHANAN of Pennsylvania, President.
J. C. BRECKINRIDGE of Kentucky, Vice President.
Politics of the Administration (Democrat).
1857. Dred Scott Decision.
1857. Panic in Business.
1857-58. Lecompton Constitution.
1858. Discovery of Silver.
1858. Lincoln-Douglas Debates.
1858. The Atlantic Cable.
1858. Admission of Minnesota.
1859. John Brown's Raid.
1859. Oregon Admitted.
1859. Petroleum Well.
1860. South Carolina secedes.
1860. Split in Democrat Party.
1860. National Constitutional Union Party.
1860. Bell and Everett Party.
1860. Eighth Census: Population, 31,443,321.
1861. Peace Convention.
1861. Confederate States of America.
1861. Star of the West.
1861. Kansas Admitted.

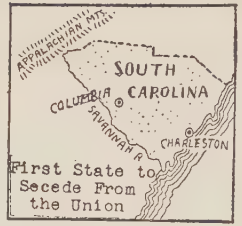
JAMES BUCHANAN.

1861. The Stars and Bars.
1860. Political Parties and Candidates.
(a) Republican, Abraham Lincoln and Hannibal Hamlin.
(b) Northern Democrats, Stephen A. Douglas and Herschel V. Johnson.
(c) Southern Democrats, John C. Breckinridge and Joseph Lane.
(d) Constitutional Union, John Bell and Edward Everett.
Issue, (Republican, Non-extension of slavery in the territories). (Northern Democrats, Popular Sovereignty). (Southern Democrats, Extension of Slavery). (Constitutional Union, The Laws and the Union).

1860 SECESSION OF SOUTH CAROLINA

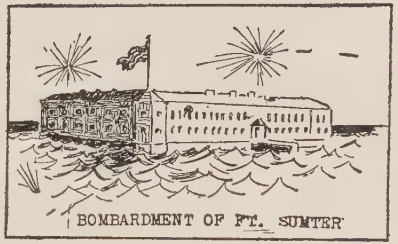
Dec. 20, SOUTH CAROLINA
April 23, Douglas Nominated
May 9, Bell Nominated
May 18, Lincoln Nominated
Sept. 12, The Fillibusters

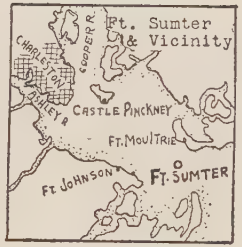

JOHN BROWN'S FORT



1861 LINCOLN INAUGURATED

April 13, Fall of Sumter (C)
June 10, Big Bethel (C)
July 21, Bull Run Battle (C)
Sept. 10, Carnifex Ferry (U)
Oct. 3, Green Briar (U)
Oct. 21, Ball's Bluff (C)
Nov. 7, Belmont (C)
Dec. 20, Drainsville (U)


BOMBARDMENT OF FT. SUMTER



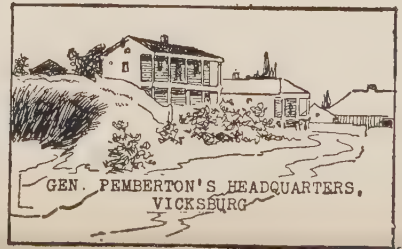
1862 ANTIETAM

Sept 16-17, BATTLE OF (U)
Feb. 16, Fort Donaldson (U)
Mch. 6-8, Pea Ridge (U)
Mch. 9, Naval Battle (U)
Apr. 6-7, Shiloh (U)
June 26, Mechanicsville (C)
Aug. 8, Cedar Mountain (C)
Dec 13, Fredericksburg (C)

BLOODY LANE - Antietam

1863 VICKSBURG

July 4, SURRENDERS (U)
Jan 2, Murfreesboro (U)
May 1-5, Chancellorsville (C)
July 1-3, Gettysburg (U)
July 9, Port Hudson (U)
Sept19-20, Chickamauga (C)
Nov.24-25, Lookout Mountain (U)


GEN. PEMBERTON'S HEADQUARTERS, VICKSBURG

1864 EARLY'S RAID

May 5-6, Wilderness (I)
May 8-18, Spottsylvania (I)
June 3, Cold Harbor (C)
June 19, Naval Battle (U)
Oct. 29, Sheridan's Ride (U)
Dec. 16, Nashville (U)
Dec. 21, Savannah Taken (U)

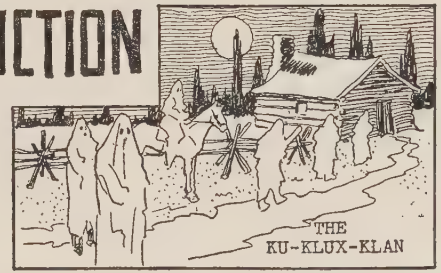
1865 RICHMOND TAKEN

Feb. 18, Charleston Captured (U)
Feb. 21, Wilmington (U)
Apr. 9, Lee Surrenders (U)
Apr. 26, Johnson Surrenders (U)
May 11, Pres. Davis Captured (U)
Dec. 18, Thirteenth Amendment.

EVACUATION OF RICHMOND

1866/1876 YEARS OF RECONSTRUCTION

1868, Johnson Impeached.
1868, Amnesty Proclamation.
1868, Fourteenth Amendment.
1870, Fifteenth Amendment.
1871, The Ku-Klux-Klan


THE KU-KLUX-KLAN

SLAVERY, the key word to study the events of the Civil War, will help the diligent student in his work of reference. It will remind him of many historical facts and dates from the Secession of South Carolina, in 1860, to the end of the Reconstruction, in 1876. Although slavery was only an indirect cause of this war, it serves as a reminder of many events and dates which are of importance to the student of history.

1861 to 1865.

ABRAHAM LINCOLN, of Illinois, President.
HANNIBAL HAMLIN, of Maine, Vice President.
Politics of the Administration (Republican).

ABRAHAM LINCOLN.

1861-65. Civil War.
1861. Death of Stephen A. Douglas.
1861. Organization of the Bureau of Agriculture.
Proposed Thirteenth Amendment.
1862. Homestead Act.
1862. Slavery prohibited in the Territories and abolished in the District of Columbia.
1862. First Issue of Greenbacks.
1863. Founding of National Banks.
1863. Admission of West Virginia.
1864. Nevada Admitted.
1864. Political Parties and Candidates.
(a) (Radical) Republican, John C. Frémont and John Cochrane.
(b) Democrat, George B. McClellan and George H. Pendleton.
(c) (Regular) Republican, Abraham Lincoln and Andrew Johnson.

The above nominations were made, but by September Frémont and Cochrane withdrew, and Abraham Lincoln and Andrew Johnson were elected by the Republican Party.

CAUSES OF THE CIVIL WAR.

I. Remote—
(a) Slavery.
(b) State Rights.
(c) Want of Intercourse between North and South.
(d) Increase of Territory.
(e) Different Systems of Labor in North and South.
(f) Different Construction of the Constitution.
(g) Publication of Sectional Books.
II. Immediate—
(a) Secession of the States.

INFLUENCES THAT LED TO THE CIVIL WAR.

1793. Invention of the Cotton Gin.
1820. Missouri Compromise.
1832. Nullification Act of South Carolina.
1832. Antislavery Society.
1845. Annexation of Texas.
1850. Fugitive Slave Law.
1850. Personal Liberty Laws.
1854. Kansas-Nebraska Bill.
1857. Dred Scott Decision.
1859. John Brown's Raid.
Protective Tariff Law.
Antislavery Parties:
(a) Liberty (b) Free Soil (c) Republican.

CIVIL WAR.

Generals in chief:
(1) Union—
(a) Winfield Scott.
(b) H. W. Halleck.
(c) George B. McClellan.
(d) U. S. Grant (Lieutenant General).
(2) Confederate—
(a) Robert E. Lee.

EVENTS OF 1861.

April 12, Fort Sumter.
April 15, Call for Troops.
April 19, Baltimore Riot.
Contrabands.
General condition of the North and South.
Nov. 1, Commander in chief.
Strength of the armies in the North and South.
April 19, Southern Ports Blockaded.
July 2, Battle of Bull Run or Manassas.
Nov. 8, Trent Affair.
Union Plan of the War.

(Method Book, Opp. 477)

PRESIDENT LINCOLN VISITING THE HEADQUARTERS OF GENERAL McCLELLAN, OCT. 3, 1862, AFTER THE BATTLE OF ANTIETAM, THE LAST BATTLE OF GENERAL McCLELLAN.

EVENTS OF 1862.

Feb. 6, Fort Henry.
Feb. 14 to 16, Fort Donelson.
Mar. 9, *Merrimac* and *Monitor*.
April 6 and 7, Battle of Shiloh or Pittsburg Landing.
April 7, Island No. 10.
April 25, Capture of New Orleans.
Peninsular Campaign.
June 25 to July 1, Seven Days' Battle.
Sept. 17, Battle of Antietam or Sharpsburg.
Sept. 14, Battle of South Mountain.
Dec. 13, Battle of Fredericksburg.
Dec. 31, Battle of Murfreesboro.
Lee's Invasion of Maryland.

PRINCIPAL SCENES OF THE CIVIL WAR.

EVENTS OF 1863.

Jan. 1, Emancipation Proclamation.
Lee's Second Invasion of the North.
May 2 and 3, Battle of Chancellorsville.
July 1, 2, and 3, Battle of Gettysburg.
Opening of the Mississippi.
July 4, Surrender of Vicksburg.
July 9, Surrender of Port Hudson.
July, Draft Riots.
July, Morgan's Raid.
Siege of Charleston.
Aug. 18, Capture of Weldon Railroad.
Nov. 16 to Dec. 26, Sherman's March to the Sea.
Dec. 16, Battle of Nashville.

EVENTS OF 1864.

Red River Expedition.
March 3, Grant and the Union Armies.
May 5 and 6, Battle of the Wilderness.
May 9, Sheridan's Raid on Richmond.
May 9 and 10, Battle of Spottsylvania Court House.
May 15 to July 18, Sherman's Advance to Atlanta.
June 3, Battle of Cold Harbor.
June 19, *Kearsarge* and *Alabama*.
July 30, Explosion of Petersburg Mine.
Aug. 5, Blockade of Mobile.
Sept. 19 and 20, Battle of Chickamauga.
Nov. 23 to 25, Siege of Chattanooga.

EVENTS OF 1865.

April 2, Petersburg Surrendered.
April 3, Surrender of Richmond.
April 9, Lee Surrendered.
April 14, Assassination of Lincoln.
April 26, Johnston Surrendered.
May 10, Capture of Jefferson Davis.

BIRTHPLACE OF ABRAHAM LINCOLN

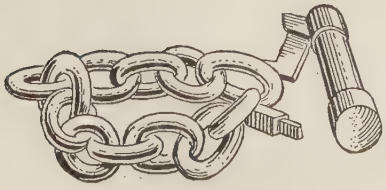
ARLINGTON HOUSE, THE HOME OF GENERAL LEE

LINCOLN SPEAKING IN THE STATE CONVENTION

ADMIRAL FARRAGUT AT MOBILE

LEE'S ARMY ON THE MARCH TO INVADE MARYLAND

BREASTWORK OF COTTON



A SLAVE-CHAIN

LIBBY PRISON, RICHMOND, VA.

SCENES FROM THE CIVIL WAR OF NORTH AMERICA.

War Prisons.
Henry Wirz.
Cost of the War.
(a) In lives (about 700,000 men).
(b) In money (increased national debt to $2,750,000,000).
(c) In property and business (cannot be estimated).
Leading Results—
(a) Freed the Slaves.
(b) Preserved the Union.

1865 to 1869.

ABRAHAM LINCOLN of Illinois, President. (Forty-four days.)
ANDREW JOHNSON of Tennessee, Vice President.
Politics of the Administration (Republican).

ANDREW JOHNSON.

1865. Reconstruction Policy of Johnson.
1865. Reconstruction Policy of Congress.
1865. Amnesty Proclamation.
1865. XIII. Amendment.
1865. Disbanding of the Army.
1866. Freedmen's Bureau and Civil Rights Bill.
1866. The Atlantic Cable.
1866. The Peabody Fund.
1867. Stanton Removed from Office.
1867. Purchase of Alaska.
1867. Maximilian in Mexico.
1867. Bureau of Education Established.
1867. Tenure of Office Act.
1867. Admission of Nebraska.
1868. Burlingame Treaty.
1868. Impeachment of Johnson.
1868. Organization of Ku-Klux Klan.
1868. Greenback Party.
1868. XIV. Amendment.
1869. XV. Amendment.
1868. Political Parties and Candidates.
(a) Republican, U. S. Grant and Schuyler Colfax.
(b) Democrat, Horatio Seymour and F. P. Blair.
Issue, Rights of Seceded States and Negro Suffrage.

1869 to 1877.

ULYSSES S. GRANT of Illinois, President.
SCHUYLER COLFAX of Indiana, and HENRY WILSON of Massachusetts, Vice Presidents.
Politics of the Administration (Republican).
1869. Union Pacific Railroad.
1870. Weather Bureau.
1870. Fenian Invasion of Canada.
1870. Ninth Census: Population, 38,558,371.
1871. Joint High Commission.
1871. Treaty of Washington.
1871. Alabama Claims.
1871. Geneva Arbitration.
1871. Force Bill.
1871. Chicago Fire.
1872. Modoc War.
1872. Liberal Republicans.
1872. Boston Fire.
1872. Crédit Mobilier.
1873. Panic of 1873.
1873. Salary Act or Salary Grab.

ULYSSES S. GRANT.

1873. Demonetization of Silver.
1874. Inflation Bill.
1874. Whiskey Ring.
1875. Resumption Act.

1876. General Custer in the Sioux War.
1876. Centennial Exposition at Philadelphia.
1876. Loan Office Certificates.
1876. Admission of Colorado.
1877. Telephone and Phonograph.
1877. Joint Electoral Commission.
1876. Political Parties and Candidates.
(a) Republican, R. B. Hayes and W. A. Wheeler.
(b) Democrat, S. J. Tilden and T. A. Hendricks.
(c) Greenback, Peter Cooper and S. F. Carey.
(d) Prohibition, J. C. Smith and R. G. Stewart.
Issue, Resumption of Specie Payment.

1877 to 1881.

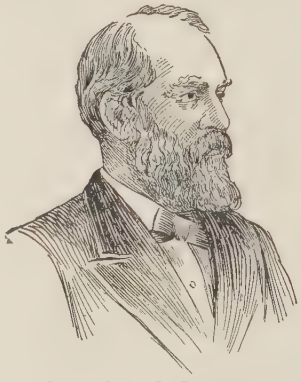
RUTHERFORD B. HAYES of Ohio, President.
WILLIAM A. WHEELER of New York, Vice President.
Politics of the Administration (Republican).

RUTHERFORD B. HAYES.

1877. Withdrawal of Troops in the South.
1877. Railroad Strikes.
1877. Halifax Award.
1877. Bland Silver Bill.
1875-81. Captain Eads.
1878. Bland-Allison Bill.
1878. Silver Remonetized.
1878. Yellow Fever in the South.
1879. Life-Saving Service Established.
1879. Negro Exodus.
1879. Resumption of Specie Payment.
1880. Treaties with China.
1880. Tenth Census: Population, 50,155,783.
1880. Political Parties and Candidates.
(a) Republican, James A. Garfield and Chester A. Arthur.
(b) Democrat, Winfield S. Hancock and William H. English.
(c) Greenback, J. B. Weaver and E. J. Chambers.
(d) Prohibition, Neal Dow and H. A. Thompson.
Issue, Protective Tariff was the leading issue.

1881 to 1885.

JAMES A. GARFIELD of Ohio, President. (7 months, 14 days.)
CHESTER A. ARTHUR of New York, Vice President.
Politics of the Administration (Republican).



JAMES A. GARFIELD.

1881. Star Route Frauds.
1881. Assassination of Garfield.
1881. Centennial at Yorktown, Va.
1882. Overflow of the Mississippi River.
1882. Trial and Execution of Guiteau.
1882. Edmunds Anti-Polygamy Bill.
1882. Red Cross Society.
1883. Completion of the Brooklyn Bridge.
1883. Civil Service Bill.
1883. Adoption of Standard Time.
1883-5. Reduction of Letter Postage.
1884. Anti-Chinese Bill.
1884. Cotton Centennial Exhibition.
1884. Anti-Monopoly and Labor Parties.
1885. Washington Monument.
1884. Political Parties and Candidates.
(a) Republican, James G. Blaine and John A. Logan.

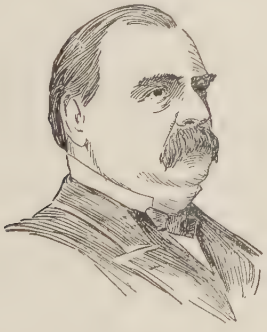
(b) Democrat, Grover Cleveland and Thomas A. Hendricks.
(c) Prohibition, J. P. St. John and William Daniel.
(d) Greenback Labor, Benjamin F. Butler and A. M. West.
(e) American Prohibition National, S. C. Pomeroy and J. A. Conant.

CHESTER A. ARTHUR.

(f) Anti-Monopoly, Benjamin F. Butler and A. M. West.
(g) Equal Rights, Belva A. Lockwood and M. L. Stow.
Issue, Republicans for protection, the Democrats for revenue tariff.

1885 to 1889.

GROVER CLEVELAND of New York, President.
THOMAS A. HENDRICKS of Indiana, Vice President.
(8 months, 21 days.)
Politics of the Administration (Democrat).



GROVER CLEVELAND.

1885. Death of the Vice President.
1885. Civil Service Reform.
1885. Anti-Contract-Labor Law.
1886. Chicago Anarchists.
1886. Presidential Succession Law.
1886. Charleston Earthquake.
1886. Statue of Liberty.
1887. Inter-State Commerce Act.
1887. Electoral Count Act.
1888. Chinese Exclusion Act.
1888. Department of Labor.
1888. Mills Tariff Bill.
1888. Department of Agriculture.
1888. Political Parties and Candidates.
(a) Republican, Benjamin Harrison and Levi P. Morton.
(b) Democrat, Grover Cleveland and Allen G. Thurman.
(c) Prohibition, C. B. Fisk and J. A. Brooks.
(d) Union Labor, A. J. Streeter and C. E. Cunningham.
(e) United Labor, R. H. Cowdrey and W. H. T. Wakefield.
(f) Equal Rights, Belva A. Lockwood and A. H. Love.
Issue, Tariff was the leading issue between the leading parties.

1889 to 1893.

BENJAMIN HARRISON of Indiana, President.
LEVI P. MORTON of New York, Vice President.
Politics of the Administration (Republican).

BENJAMIN HARRISON.

1889. Oklahoma Opened.
1889. Australian Ballot System.
1889. Farmers' Alliance and Industrial Union.
1889. Pan-American Congress.
1889. Johnstown Flood.

1889. Washington Centennial.
1889. New States { 1. North Dakota. 2. South Dakota. 3. Montana. 4. Washington.
1889. New War Ships.
1889. International Maritime Council.
1890. Admission of Idaho and Wyoming.
1890. Anti-Trust Act.
1890. Sherman Silver Purchase.
1890. McKinley Tariff Bill.
1890. New Pension Act.
1890. Eleventh Census: Population, 62,622,250.
1890. Land Mortgage Scheme.
1891. People's Party Organized.
1892. Homestead Strikes.
1892. Dedication of World's Fair Buildings.
Woman Suffrage.
1892. Political Parties and Candidates.
(a) Democrat, Grover Cleveland and Adlai E. Stevenson.
(b) Republican, Benjamin Harrison and Whitelaw Reid.
(c) People's, J. B. Weaver and J. G. Field.
(d) Prohibition, John Bidwell and J. B. Cranfield.
(e) Socialist Labor, Simon Wingand, C. H. Matchett.
Issue, Tariff, between the Democrat and Republican Parties.

1893 to 1897.

Grover Cleveland of New York, President.
Adlai E. Stevenson of Illinois, Vice President.
Politics of the Administration (Democrat).
1893. Special Session of Congress.
1893. Panic in Business.
1893. Bering Sea Commission.
1893. Gold Reserve.
1893. Columbian Exposition.
1893. Repeal of Sherman Silver Act.
1894. Repeal of the Force Act.
1894. Coxey's Commonweal Army.
1894. Pullman Strike.
1894. Hawaiian Question.
1894. Wilson Bill.
1895. Venezuelan Boundary Question.
1895. Cuban Revolt.
1895. Bond Issues.
1896. Admission of Utah.
1896. Arbitration Treaty at Washington.
1896. Political Parties and Candidates.
(a) Republican, William McKinley and Garret A. Hobart.
(b) Democrat, William J. Bryan and Arthur Sewall.
(c) National Democrat, J. M. Palmer and S. B. Buckner.
(d) Silver Party, W. J. Bryan and Arthur Sewall.
(e) Populists, W. J. Bryan and Thomas Watson.
(f) Prohibition, Joshua Levering and Hal Johnson.
(g) National Party, C. E. Bentley and J. H. Southgate.
(h) Socialist Labor, C. H. Matchett and M. Maguire.
Issues, High protective tariff and free coinage of silver and gold.

1897 to 1901.

William McKinley of Ohio, President.
Garret A. Hobart of New Jersey, Vice President.
Politics of the Administration (Republican).

WILLIAM McKINLEY.

1897. McKinley's Inaugural Address.
1897. Dingley Tariff Bill.
1897. Cuban Question.
1897. Congressional Library Building.
1898. Increase of Exports.
1898. Greater New York.
1898. The *Maine* Destroyed.
1898. Naval Court of Inquiry.
1898. President McKinley's Special Message to Congress.
1898. United States Declared War against Spain.

1898. Battle of Manila.
1898. Destruction of Cervera's Fleet.
1898. Capture of Santiago.
1898. War Bonds and War Taxes.
1898. Treaty of Peace.
1898. Trans-Mississippi Exposition.
1899. Wireless Telegraphy.
1900. Galveston Disaster.
1900. Twelfth Census: Population, 76,303,387.
1900. Total Cost of the War with Spain.
1900. Political Parties and Candidates.
(a) Republican, William McKinley and Theodore Roosevelt.
(b) Democrat, William J. Bryan and Adlai E. Stevenson.
(c) Peoples, William J. Bryan and Adlai E. Stevenson.
(d) Peoples (Middle-of-the Road), Wharton Barker and Ignatius Donnelly.
(e) Silver Republican, William J. Bryan and Adlai Stevenson.
(f) Prohibition, John G. Woolley and H. B. Metcalf.
(g) Socialist Labor, J. F. Malloney and Valentine Rennel.
Issue, Free silver, protective tariff, and expansion were the leading issues.

WAR WITH SPAIN. 1898.

Causes—
(a) Remote (Cuban Question).
(b) Immediate (Destruction of the *Maine*).
April 25. United States declares War. 2699.
April 27. Batteries at Matanzas destroyed.
April 30. Dewey's Victory at Manila.
May 12. Admiral Sampson's Fleet at San Juan.
June 3. Hobson Sinks the *Merrimac*.
June 24. Rough Riders attacked.
July 2. Battle of El Caney.
July 3. Admiral Cevera's Fleet Captured.
July 17. General Toral surrendered Santiago.
July 29. General Miles captured Ponce.
August 7. Manila captured.
August 12. Protocol signed at Washington.
Dec. 10. Treaty of Peace signed at Paris.

1901 to 1905.

WILLIAM MCKINLEY of Ohio, President. (6 mo., 10 da.).
THEODORE ROOSEVELT of New York, Vice President.
Politics of the Administration (Republican).

THEODORE ROOSEVELT.

1901. Assassination of William McKinley.
1901. Roosevelt becomes President.
1901. Clayton-Bulwer Treaty.
1901. Death of Hay-Pauncefote Treaty.
1901. Death of Queen Victoria.
1901. Death of Ex-President Harrison
1901. Death of William M. Evarts.
1901. Capture of Aguinaldo.
1901. Schley Court of Inquiry.
1901. Pan-American Congress.
1901. Schley-Sampson controversy. 2551.
1901. Pan-American Exposition, Buffalo, N. Y.
1901. First Official Act of President Roosevelt.
1901-1902 Steel and Railroad Combinations.
1902. Visit of Prince Henry of Prussia to the United States.
1902. Anthracite Coal Strike.
1903. Iroquois Theater (Chicago) fire.
1903. Panama Canal purchased.
1904. Louisiana Purchase Exposition.
1904. Political Parties and Candidates.
(a) Democrat, Alton B. Parker and Henry G. Davis.
(b) Republican, Theo. Roosevelt and Charles W. Fairbanks.
(c) Prohibition, Silas C. Swallow and George W. Carroll.
(d) Socialist, Eugene V. Debs and Benjamin Hanford.

(e) Peoples, Thomas E. Watson and Thomas A. Tibbles.
(f) Social Labor, Charles H. Corrigan and William W. Cox.
(g) Continental, Austin Holcomb and A. King.

Issue, Annexation of noncontiguous territory without the Consent of the People who reside within its Boundaries.

1905 to 1909.

THEODORE ROOSEVELT of New York, President.

CHARLES WARREN FAIRBANKS of Indiana, Vice President.

Politics of the Administration (Republican).

1905. Lewis and Clark Exposition, Portland, Ore.

1905. Treaty of Portsmouth signed at Portsmouth, N. H.

1906. Earthquake in California.

1907. Death of Richard Mansfield.

1907. Panic in business.

1907. Jamestown Exposition, Norfolk, Va.

1907. War scare with Japan.

1907. Admission of Oklahoma.

1908. Death of Grover Cleveland.

1908. Frederick A. Cook announced the Discovery of the North Pole.

1908. Political Parties and Candidates.
(a) Republican, William H. Taft and James S. Sherman.
(b) Democrat, William J. Bryan and John W. Kern.
(c) Prohibition, Eugene W. Chafin and Aaron S. Watkins.
(d) Socialist, Eugene V. Debs and Benjamin Hanford.
(e) Independence, Thomas L. Hisgen and John T. Graves.
(f) Social Labor, August Gilhaus and Donald Munro.
(g) Peoples, Thomas E. Watson and Samuel W. Williams.
(h) United Christian, David B. Turney.

Issues, Revision of the Tariff and Regulation of the Trusts.

1909. General enactment of Primary Election Laws in the states, requiring that Candidates for Office be nominated at Primary Elections.

1909 to 1913.

WILLIAM HOWARD TAFT of Ohio, President.

JAMES SCHOOLCRAFT SHERMAN of New York, Vice President.

Politics of the Administration (Republican).

WILLIAM HOWARD TAFT.

1909. Robert E. Peary reached the North Pole.

1909. Roosevelt's Hunting Tour to Africa.

1909. Large Emigration to Canada.

1909. Alaska-Yukon Exposition at Seattle.

1910. Thirteenth Census: Population, 91,641,197.

1910. Total Population, including Insular Possessions, 101,098,586.

1910. Extensive Election Frauds in Indiana.

1910. Flying Machine.

1911. Postal Savings Banks established.

1911. Panama Canal Exposition located at San Francisco (in 1915).

1911. Reciprocity in Trade proposed between Canada and the United States.

1911. Troops sent to the Mexican border to protect American interests during the revolution in Mexico.

1912. New States { New Mexico. Arizona.

1912. Progressive Party Organized.

1912. Political Parties and Candidates.
(a) Democrat, Woodrow Wilson and Thomas Riley Marshall.
(b) Progressive, Theodore Roosevelt and Hiram W. Johnson.
(c) Republican, William Howard Taft and James S. Sherman.
(d) Socialist, Eugene V. Debs and Emil Seidel.
(e) Prohibition, Eugene W. Chafin and Aaron S. Watkins.
(f) Socialist Labor, Arthur Reimer and August Gillhaus.

Issues, Tariff Revision, Civil Service Reform, Banking Legislation, and Rule of the People.

1912. Vice President James Schoolcraft Sherman died, Oct. 30.

1913. Parcel Post Law went into effect Jan. 1.

1913. Ratification of the Sixteenth Amendment to the United States Constitution, which authorizes Taxes on Incomes.

1913 to 1921.

Woodrow Wilson of New Jersey, President.

Thomas Riley Marshall of Indiana, Vice President.

Politics of the Administration (Democrat).

WOODROW WILSON.

1913. Ratification of the change in the Constitution which requires that United States Senators shall be elected by direct vote.

1913. Underwood Tariff Bill, revising the tariff downward and enacting the Income Tax Law.

1915. Panama-Pacific Exposition at San Francisco, Cal.

1916. Controversy with Germany because of methods of submarine warfare; with Great Britain because of interference with commerce and the mails.

1916. Political Parties and Candidates:
(a) Democrat, Woodrow Wilson and Thomas Riley Marshall.
(b) Republican, Charles E. Hughes and Charles W. Fairbanks.
(c) Socialist, Allan L. Benson and George R. Kirkpatrick.
(d) Prohibition, J. Frank Hanly and Ira D. Landrith.
(e) Social Labor, Arthur E. Reimer and Caleb Harrison.

Issues, Relations with Mexico, Larger Army and Navy, Questions relating to the War in Europe.

1916. American Army under General Pershing withdrawn from Mexico.

1917. Danish West Indies acquired by the United States and renamed the Virgin Islands.

1917. The President, on April 6, signed a joint Resolution of Congress "Declaring a State of War Exists with Germany."

War with Germany, 1917.

Causes—
(a) Remote (Paternal element in German Government in contrast to Individualism in American Government).
(b) Immediate (Unrestricted Warfare by German U-Boats in the blockaded zone of Europe).

American Aims (Readjustment of Power tending to secure the future Peace of the World and the Welfare of its People).

Note: *See page 728 for subsequent events of the World War.*

1920. Universal Woman's Suffrage and Constitutional Prohibition adopted by the Nation.

1920. Political Parties and Candidates:
(a) Republican, Warren G. Harding and Calvin C. Coolidge.

(b) Democrat, James M. Cox and Franklin D. Roosevelt.
(c) Socialist, Eugene V. Debs and Seymour Stedman.
(d) Farmer-Labor, Parley P. Christensen and Max S. Hayes.

The Democrat Party defeated by the largest vote ever polled on the Issues which arose during and subsequent to the World War, the principal Issue being whether the Country should enter the League of Nations proposed by the Second Treaty of Versailles.

1921 to 1923.

WARREN GAMALIEL HARDING.

WARREN GAMALIEL HARDING of Ohio, President.

CALVIN C. COOLIDGE of Massachusetts, Vice President.

Politics of the Administration (Republican).

1921. Colombian Treaty ratified by the United States, awarding $25,000,000 to Colombia because of Issues growing out of the Secession of Panama and the American Purchase of the Panama Canal Zone.

1921. Controversy with Japan regarding the Island of Yap, one of the Caroline Islands, important as a base of naval and telegraphic communication with Asia and the Philippines.

1921. Peace Treaty with Germany and Austria-Hungary and a general Resumption of Trade Relations with the countries formerly at War.

1922. President Harding vetoed the Soldiers' Bonus bill, on the ground that distributing "adjusted compensation" would establish a dangerous precedent; the attempt to pass the bill over the veto of the President failed in Congress by four votes of the necessary two-thirds majority.

1923. Death of President Harding at San Francisco, Cal., Aug. 2d, at a few minutes before midnight.

1923 to 1929.

1923. President Calvin Coolidge took the oath of office on Aug. 3d before his father, John C. Coolidge, a notary public, at Plymouth, Vt.

1923. Secretary of the Treasury, Andrew W. Mellon, proposed a reduction of taxes by saving annually $323,000,000 to tax-payers, but announced that no reduction was possible if the proposed soldiers-bonus measure would be adopted by Congress, which, according to estimates, would aggregate more than $4,000,000,000.

1924. President Calvin Coolidge was elected to succeed himself as President.

1925. President Coolidge inaugurated for the full term on March 4, 1925. In the course of his inaugural address he said, "The essence of a republic is representative government."

1926. Jan. 27, the Senate approved the entrance of the United States as a member of the Permanent Court of International Justice with the reservation that this approval "Shall not be so construed as to require the United States to depart from its traditional policy of not entangling itself in the political policy or internal administration of any foreign state."

1929. President Herbert C. Hoover, on Mar. 4, became President of the United States.

Leading Facts of American History.

History may be defined as the record of the achievements of man. It is more than a mere array of names and dates, since it embraces the entire story of human development from the earliest time to the present day. The student will find a vast fund of information in the subheads *History* in the articles which treat of the continents, provinces, states, and countries. This information is so systematically arranged that the important facts may be found in their appropriate places. For such information see Africa, Asia, Canada, England, Germany, North America, United States, etc

The history of mankind has its beginning in the myths and traditions of ancient times. It may be said to date from the earliest peoples of Asia and Africa, being somewhat localized in the vicinity of the Mediterranean Sea, particularly in Arabia, Persia, Assyria, and Egypt. From these regions the field of action extended westward into Europe, where history assumes largely the story of nations. However, Eastern Asia has a much older history than the continent of Europe, particularly India and China, where mankind was cradled in the early ages of mythical legends. The earliest authentic history of America is closely associated with the discoveries of Cabot, Cartier, Baffin, Columbus, Champlain, Drake, De Soto, Magellan, Ponce de León, Smith, Verrazano, and Vespucci. Consult also the articles on American Literature, Biography, Braddock. Burgoyne, Diaz, History, Howe, Mackenzie, Montcalm, Political Parties, Revolutionary War, Riel, Tecumseh, Tupper, War of 1812, Washington, Whiskey Rebellion, etc.

The following LEADING FACTS OF AMERICAN HISTORY will greatly facilitate in fixing the more important events in the mind with reference to the order of time.

YEAR.

876. Discovery of Greenland by the Icelanders.
1001. Lief Eric visited the coast of New Brunswick and New England.
1436. Columbus born at Genoa, Italy.
1492. Aug. 3, Columbus sailed from Palos, in Spain.
Oct. 12, he discovered Guanahani (Watling's Island), one of the Bahamas.
Oct. 27, Cuba discovered.
Dec. 6, Hayti or Hispaniola discovered.
1493. March, Columbus returned to Spain.
Sept. 25, he sailed from Cadiz on his second voyage.
Dec. 8, he founded Isabella in Hispaniola, the first European town in the New World.
1494. Columbus discovered Jamaica.
1496. Columbus returned to Spain.
Tobacco discovered in Hayti.
1497. Newfoundland and Labrador discovered by John and Sebastian Cabot.
1498. May 30, Columbus sailed from Spain on his third voyage.
July 31, Trinidad discovered.
Aug. 1, Columbus discovered the South American continent.
1499. South America visited by Ojeda and Amerigo Vespucci.
1500. The Amazon at its mouth discovered by Pinçon.
Columbus sent back in chains to Spain by Bovadilla.
April 23, Brazil discovered by Cabral.
1502. May 11, Columbus sailed from Spain on his fourth voyage.
Aug. 14, he discovered the Bay of Honduras.
1504. Columbus returned to Spain.
1506. May 20, he died at Valladolid, in his seventy-first year.
1507. Martin Waldseemüller suggested the name of America.
1508. Saint Lawrence River first navigated by Aubert.
1510. First colony planted on the main land, at the Isthmus of Darien, by Balboa.
1512. Florida discovered by Juan Ponce de León.
Baracoa, the first town in Cuba, built by Velásquez.
1513. Sept. 29, Pacific Ocean discovered by Vasco Nuñez de Balboa.
1516. Rio de la Plata discovered by Juan Diaz de Solis.
1517. Patent granted by Charles V. for an annual import of 4,000 Negro slaves to Hispaniola, Cuba, Jamaica, and Porto Rico.
Yucatan explored by Francis Hernandez Cordova.
1518. Grijalva discovered the southern part of Mexico.
1519. March 13, Cortez landed at Tabasco in Mexico.
April 22, he arrived at San Juan de Ulloa.
Vera Cruz settled by Cortez.
Nov. 8, Cortez entered the city of Mexico.
1520. Death of Montezuma.

YEAR.

1520. Magellan discovered Patagonia.
Vásquez de Ayllon visited Carolina.
1521. Death of Guatemozin, and conquest of Mexico by Cortez.
1522. Bermudas discovered by Juan Bermudez.
1524. Verrazani explored the coast of North America.
1525. First invasion of Peru by Pizarro and Almagro.
1526. Sebastian Cabot explored the La Plata.
1531. Second invasion of Peru by Pizarro.
1533. Lima founded by Pizarro.
1535. Chili invaded by Almagro.
Cartier explored the Saint Lawrence.
1537. California discovered by Cortez.
1539. Ferdinand de Soto led an expedition to conquer Florida.
1541. Orellana explored the Amazon from Peru to the Atlantic.
De Soto discovered the Mississippi.
1545. Silver mines of Potosí, Bolivia, discovered.
1549. Roberval sailed for Canada with a colony.
1562. Coligny attempted to found a colony of French Protestants on Saint John's River, Florida.
1563. Slaves first imported into the West Indies by the English.
1565. Saint Augustine, Fla., founded by the Spaniards, under Menéndez.
1576. Elizabeth's and Frobisher's straits discovered by Martin Frobisher.
1578. Drake explored the coast of Oregon.
1582. Espejo explored New Mexico, finding an Indian village at Santa Fé.
1583. Sir Humphrey Gilbert attempted to found a colony in Newfoundland.
1584. Sir Walter Raleigh dispatched two vessels to Virginia.
1585. Raleigh attempted to found a colony at Roanoke.
1586. Discovery of Davis Strait.
Tobacco introduced into England by Mr. Lane.
1587. Aug. 13, first Indian baptized in Virginia.
First white child, Virginia Dare, born in Virginia.
1602. May 15, Cape Cod discovered and named by Bartholomew Gosnold.
May 21, Gosnold discovered Martha's Vineyard.
1603. Coast of Maine visited by Martin Pring.
1605. Port Royal, Acadia (Nova Scotia), founded by the French under De Monts.
1606. James I. granted North Virginia to the Plymouth Company, and South Virginia to the London Company.
1607. The Plymouth Company sent George Popham to found the Sagadahoc Colony. at the mouth of the Kennebec, North Virginia.
The London Company sent Christopher Newport to found the Jamestown Colony, in South Virginia.
May 13, Jamestown founded, being the first English settlement.
1608. July 3, Quebec founded by Champlain.
Pocahontas saved the life of Captain John Smith of Virginia.
1609. Hudson River discovered by Henry Hudson.
1610. Delaware Bay named in honor of Lord de la Ware, who visited the bay at that time and died on his vessel at its mouth.
1611. Lake Champlain discovered by Champlain.
1613. Pocahontas married John Rolfe.
1614. New Amsterdam settled by the Dutch on Manhattan Island (now New York) and at Fort Orange (Albany).
1615. Tobacco first cultivated in Virginia.
1616. Baffin Bay discovered by Baffin.
1617. Pocahontas died in England.
1619. June 19, first colonial assembly in Virginia.
Twenty Negro slaves brought to Virginia by the Dutch.
1620. Nov. 10, the Mayflower anchored in Cape Cod harbor.
Dec. 21, landing of the Puritans at Plymouth.
1621. May 12, first marriage at Plymouth.
1622. Massacre of 347 men, women, and children of the Virginia colony by the Indians.
1623. Maine and New Hampshire settled by English colonists.
New Jersey settled by the Swedes and English.
1624. Virginia deprived of its charter and made a royal province by James I.
1628. Salem, Mass., founded by John Endicott.
1629. Charlestown founded by the Massachusetts Bay Colony.
1630. Boston, Cambridge, Roxbury, and Dorchester founded.
John Winthrop first governor of Massachusetts Bay Colony.
Oct. 19, first general court held at Boston.
1633. First house erected in Connecticut, at Windsor.
1634. Maryland founded by Lord Baltimore.
Roger Williams banished from Massachusetts.
1636. Hartford, Conn., was settled.

YEAR.

1636. Harvard College was founded.
Providence, R. I., founded by Roger Williams.
1637. First synod convened at Newtown (now Cambridge), Mass.
Destruction of the Pequots in Connecticut.
Mrs. Anne Hutchinson banished from Massachusetts.
1638. New Haven founded by Eaton and Davenport.
Rhode Island Plantation was founded.
Swedes and Finns settle in Delaware, near Wilmington.
June 1, earthquake in New England.
1639. First printing press set up at Cambridge, Mass., by Stephen Day.
1642. Montreal founded by the French.
Oct. 9, first commencement at Harvard College.
1643. May 19, union of the New England colonies.
1645. Clayborne's Rebellion in Maryland.
1646. First act passed by the general court of Massachusetts, for the spread of the gospel among the Indians.
1648. First execution for witchcraft.
New London settled.
1650. Harvard College chartered.
Constitution of Maryland prepared.
1651. Navigation act passed by England, restricting the commerce of the colonies.
1652. First mint established in New England.
1654. Yale College first projected by Mr. Davenport.
1655. Stuyvesant conquered the Swedish settlement in Delaware.
Conquest of Jamaica by the English.
1656. First arrival of Quakers in Massachusetts.
1659. Four Quakers executed on Boston Common.
1660. Restoration of monarchy in England under Charles II.
1663. Carolina granted to Lord Clarendon by Charles II.
1664. Aug. 27, surrender of New Amsterdam to the English and named New York.
1665. June 12, New York City incorporated.
Elizabethtown, N. J., settled.
1672. Charleston, S. C., founded.
First copyright granted by Massachusetts.
1673. New York retaken by the Dutch; restored in 1674.
Mississippi River explored by Marquette and Joliet.
1675. June 24, commencement of King Philip's War; attack on Swanzey.
1676. Aug. 12, death of King Philip.
New Jersey divided into East and West Jersey.
Bacon's rebellion in Virginia.
1681. Grant of Pennsylvania to William Penn.
1682. Oct. 24, Penn arrived in America.
De la Salle took possession of the country on both sides of the Mississippi River, naming it Louisiana.
1683. First legislative assembly in New York.
Roger Williams died, in his eighty-fourth year.
Philadelphia was founded by William Penn.
1686. First Episcopal parish formed in Boston.
Sir Edmund Andros appointed governor of New England by James II.
Massachusetts deprived of its charter.
1687. First printing press established near Philadelphia, by William Bradford.
1688. New York and New Jersey united to New England under Sir Edmund Andros.
1689. William III. acceded to the throne of England.
Sir Edmund Andros seized and imprisoned in Boston and sent to England.
May 17, King William's War declared against France.
1690. Feb. 8, Schenectady burned by the French and Indians.
First paper money issued in Massachusetts.
Successful expedition of Sir William Phips against Port Royal, Nova Scotia.
1691. Trial and execution of Leisler and Milborne at New York, on a charge of treason.
1692. Massachusetts Bay Colony and Plymouth Colony united under a new charter.
The witchcraft delusion rife at Salem, Mass.
William and Mary College, Virginia, chartered.
1693. Episcopal Church established in New York.
First printing press established in New York, by William Bradford.
1695. Rice culture introduced into Carolina from Africa.
1696. Indian attack on Haverhill.
1697. Peace of Ryswick, ending King William's War.
1698. First French colony arrived at the mouth of the Mississippi.
Earl of Bellamont governor of New York.
Yale College founded at Saybrook, Conn.
1699. Kidd, the pirate, apprehended at Boston.

YEAR.

1702. Episcopal Church established in New Jersey and Rhode Island.
1703. Culture of silk introduced into Carolina.
Duty of £4 laid on imported Negroes in Massachusetts.
Queen Anne's War began.
1704. Tonnage duty laid by Rhode Island on foreign vessels.
Act "to prevent the growth of popery" passed by Maryland.
First newspaper (*Boston News Letter*) published at Boston, by Bartholomew Green.
French and Indians attack Deerfield, Mass.
1706. Bills of credit issued by Carolina.
1709. First printing press in Connecticut, set up at New London, by Thomas Short.
1710. First colonial post office at New York.
German settlements founded in North Carolina.
Nova Scotia permanently annexed to the British crown.
1711. South Sea Company incorporated.
1712. Free schools founded in Charlestown, Mass.
1713. The Tuscaroras joined the Five Nations.
April 11, Peace of Utrecht ended Queen Anne's War.
1714. First schooner built at Cape Ann.
1716. Yale College removed from Saybrook to New Haven.
1717. New Orleans founded by the French.
Impost duties laid by Massachusetts on English manufactures and English ships.
1719. First Presbyterian Church founded in New York.
1720. Tea first used in New England.
1721. Inoculation for smallpox introduced into New England.
1722. Paper money first issued in Pennsylvania.
1724. Fort Dummer built in Vermont.
1725. First newspaper in New York (*New York Gazette*) published by William Bradford.
1726. First printing presses established in Virginia and Maryland.
1727. Earthquake in New England.
1729. North and South Carolina were separated.
1730. First printing press and newspaper established at Charleston, S. C.
1731. Fort built at Crown Point.
1732. Tobacco made a legal tender in Maryland at 1d. per pound, and corn at 20d. per bushel.
First printing press and newspaper established at Newport, R. I.
1733. Georgia settled by Oglethorpe.
Freemasons' lodge first held in Boston.
1737. Earthquake in New Jersey.
1738. College founded at Princeton, N. J.
1739. Oct. 30, Spanish War began.
1741. Jan. 1, *General Magazine and Historical Chronicle,* first published by Benjamin Franklin.
1742. Faneuil Hall erected at Boston by Peter Faneuil.
1744. March 15, King George's War began.
1745. June 17, Louisburg, on Cape Breton Island, captured by the English.
1748. Treaty of Aix-la-Chapelle; King George's War closed.
1750. First theatrical performance in Boston.
1752. June 15, Franklin demonstrated that lightning and electricity are identical.
1753. George Washington sent on an embassy to the French commandant on the Allegheny River.
1754. Columbia College in New York founded.
Colonial Congress met at Albany.
April 18, Fort Duquesne built.
May 28, Washington defeated a party of French under Jumonville at the Great Meadows.
July 4, Washington surrendered Fort Necessity to the French. Benjamin Franklin proposed a plan of union for the colonies.
Tennessee first settled.
1755. June 4, Colonel Monckton destroyed the French settlements on the Bay of Fundy.
July 9, Braddock defeated and wounded at the Battle of Monongahela.
Sept. 8, Battle of Lake George: British victory.
Expeditions against Niagara and Crown Point.
First newspaper (*Connecticut Gazette*) published at New Haven.
1756. May 17, war declared by England against France.
Loudon and Abercrombie commanded the British forces in America; Montcalm the French.
First printing press and newspaper established at Portsmouth, N. H., by Daniel Fowle.
Aug. 14, Montcalm captured Fort Oswego.
1757. Fort William Henry captured by Amherst and Wolfe.
1758. July 8, Abercrombie repulsed at Fort Ticonderoga.
July 26, Louisburg taken by the English.
Aug. 27, Fort Frontenac taken by English colonists.
Nov. 25, Fort Duquesne (now Pittsburg) taken by the English.
1759. Niagara, Ticonderoga, and Crown Point taken by the English, in July.
Sept. 13, battle on the Plains of Abraham; Wolfe and Montcalm slain.
Sept. 18, Quebec surrendered to the English.

YEAR.

1760. Pontiac's War.
1761. March 12, earthquake in New England.
1763. Feb. 10, Treaty of Paris; France surrendered to Great Britain all her possessions in North America east of the Mississippi.
First newspaper printed in Georgia.
1764. March, right to tax American colonies voted by House of Commons.
April 5, first act for levying revenue passed by Parliament.
April 21, Louisiana ordered to be given up to Spain.
1765. The Stamp Act passed by Parliament; it received the royal assent March 22.
May 29, Virginia resolutions against the right of taxation.
June 6, Massachusetts proposed a congress of deputies from the colonies.
Oct. 7, a congress of 27 delegates convened at New York, and published a declaration of rights and resolutions against the Stamp Act.
1766. February, Franklin examined before the House of Commons relative to the repeal of the Stamp Act.
March 18, the Stamp Act repealed by Parliament.
1767. June 20, taxes laid on paper, glass, painters' colors, and teas.
Nonimportation agreements adopted by the colonial assemblies.
1768. February, circular issued by the Massachusetts assembly to the other colonies to unite in obtaining a redress of grievances.
Sept. 27, British troops arrived at Boston.
1769. Dartmouth College incorporated.
American Philosophical Society organized at Philadelphia.
1770. March 5, the Boston Massacre; citizens killed by British troops on State Street.
April 12, all duties were repealed except on tea.
1773. Dec. 16, destruction of 342 chests of tea in Boston harbor.
1774. March 31, Boston port bill passed by Parliament; declaring that no person should be allowed to land or discharge, or to ship any wares or merchandise at the port of Boston.
General Gage fortified Boston Neck.
The members of the Massachusetts assembly resolved themselves into a provincial congress.
Sept. 5, First Continental Congress met at Philadelphia.
Franklin dismissed from the post office.
Committees of "safety" and "supplies" appointed by Massachusetts; 12,000 men ordered equipped for service.
1775. Several ships and 10,000 troops ordered to America from England.
April 19, British repulsed at Lexington and Concord.
May 10, Ticonderoga and Crown Point taken by the provincials under Ethan Allen.
Congress voted to raise an army of 20,000 men.
June 15, George Washington appointed commander in chief of the American army.
June 17, Battle of Bunker Hill.
July 12, Washington took command of the army at Cambridge.
Sir William Howe succeeded General Gage as commander of the royal forces in America.
Dec. 13, resolution of Congress to fit out a navy of thirteen ships.
Dec. 31, assault on Quebec; General Montgomery fell, and General Arnold was wounded.
1776. Jan. 1, Lord Dunmore burned Norfolk, Va.
March 4, Washington fortified Dorchester Heights.
March 17, Boston was evacuated by the British.
April, Washington removed his army to New York.
June 28. repulse of the British at Fort Moultrie.
July 4, Declaration of Independence was signed.
Franklin sent to Paris to obtain the favor of the French government.
Aug. 27, Battle of Long Island; the British victorious.
Washington abandons New Yory City; the British took possession Sept. 15.
Oct. 28, Battle of White Plains.
Nov. 16 and 18, the British took Fort Washington and Fort Lee.
November and December, Washington retreated through New Jersey.
Dec. 26, Battle of Trenton; Washington captured 1,000 Hessians.
1777. Jan. 3, Battle of Princeton; the British were defeated.
Washington encamped at Morristown.
April 26, Tryon destroyed Danbury, Conn.
Lafayette arrived from France with troops and supplies; Congress gave him a major general's commission, July 31.
Aug. 16, Battle of Bennington; Americans were victorious.
Sept. 11, Battle of Brandywine; British defeated the Americans.
Steuben arrived from Germany to aid the Americans; he was made a major general.
Sept. 19, Battle of Bemis Heights; indecisive.
Sept. 26, the British occupied Philadelphia.
Oct. 4, Battle of Germantown; British were victorious.
Oct. 7, Battle of Saratoga; British were defeated.
Oct. 17, surrender of the British army under Burgoyne to Gates at Saratoga.
Nov. 15, Articles of Confederation adopted by Congress, and finally ratified by the states in March, 1781, Maryland being the last to accept them.

YEAR.

1777. Nov. 16 and 18, the British captured Forts Mifflin and Mercer on the Delaware.
Dec. 18, Washington's army encamped at Valley Forge.
Conspiracy to supplant Washington.

1778. Feb. 6, treaty of alliance with France, and the independence of the United States recognized by France.
March 11, Lord North's conciliatory bills passed by Parliament.
June 18, the British evacuated Philadelphia.
June 28, Battle of Monmouth; Americans victorious.
July 3 and 4, massacre at Wyoming by Indians.
July 10, France declared war against England.
July 11, arrival of a French fleet under Count d'Estaing.
Aug. 30, General Sullivan retreated from Rhode Island.
Dec. 29, Savannah taken by the British.

1779. March 3, Battle of Briar Creek.
May 14, Norfolk taken by the British.
June 16, war declared against England by Spain.
July 5 and 7, Fairfield and Norwalk, Conn., burned by the British.
July 15, storming of Stony Point by the Americans under Wayne.
July and August, Sullivan's expedition against the Indians on the Susquehanna.
Sept. 23, Paul Jones captured two British frigates off the coast of Scotland.
Oct. 9, repulse of the Americans at Savannah.

1780. April 14, Battle at Monk's Corner, S. C.
May 6, battle on the Santee River.
May 12, surrender of General Lincoln and American army at Charleston.
July 12, arrival at Rhode Island of French fleet and army, under Admiral de Ternay and Count de Rochambeau.
Aug. 16, Battle of Sander's Creek, near Camden; Gates defeated.
Sept. 23, treason of General Arnold and arrest of Major André.
Oct. 2, Major André was hanged.
Oct. 7, Battle of King's Mountain; Americans victorious.
Nov. 12, Battle of Broad River.
Nov. 20, battle at Blackstock.
Dec. 20, war between England and Holland.

1781. Jan. 1, revolt of the Pennsylvania troops at Morristown.
Bank of North America established.
Expedition of the British under Arnold to Virginia; Richmond burned Jan. 5.
General Greene appointed to command the Southern army.
Jan. 17, Battle of the Cowpens; Americans victorious.
January and February, remarkable retreat of General Greene across the Catawba, Yadkin, and Dan rivers.
March 15, Battle of Guilford Courthouse.
April 25, Battle of Hobkirk's Hill, near Camden.
Aug. 14, American and French allied army marched from the Hudson, near New York, to Virginia; Cornwallis was hemmed in at Yorktown.
Sept. 6, burning of New London by Arnold.
Sept. 8, Battle of Eutaw Springs, and close of the campaign in South Carolina.
Sept. 30, siege of Yorktown by the Americans and French.
Oct. 19, surrender of Cornwallis and 7,000 troops at Yorktown to Washington.

1782. Feb. 27, resolutions of the House of Commons in favor of peace.
March 20, resignation of Lord North, and accession of a Whig administration under the Marquis of Rockingham.
April 17, Holland acknowledged the independence of the United States.
June 24, last battle of the Revolutionary War—a skirmish near Savannah.
Nov. 30, preliminaries of peace between the United States and Great Britain signed at Paris.

1783. Jan. 20, preliminary treaties by France, Spain, and Great Britain signed at Versailles.
Independence of the United States acknowledged by Sweden, Feb. 5; by Denmark, Feb. 25; by Spain, March 24, and by Russia, in July.
April 11, peace proclaimed by Congress; April 19, announced to the army by Washington.
Sept. 3, definite treaties of peace between England and the United States, France, Spain, and Holland.
Oct. 18, proclamation for disbanding the army; Nov. 2, Washington's farewell orders.
Nov. 25, New York evacuated by the British.
Dec. 23, Washington resigned his commission.

1784. February, first voyage from China to New York.

1785. Treaty with Prussia.
June 1, John Adams, the first ambassador from the United States to Great Britain, was presented to George III.

1786. Shay's Rebellion in Massachusetts.

1787. May to September, convention to form a Federal Constitution in session at Philadelphia.
Slavery prohibited in the Northwest Territory.

1788. Federal Constitution adopted by eleven states.

YEAR.

1789. George Washington the first President; inaugurated April 30; John Adams Vice President.
1790. District of Columbia ceded by Virginia and Maryland.
May 29, Federal Constitution adopted by Rhode Island.
June 1, first United States census; population, 3,929,214.
Imports for 1790, $23,000,000; exports, $539,156.
1791. Jan. 1, amount of the national debt, $75,463,476.
March 4, Vermont admitted into the Union.
Bank of the United States established.
1792. June 1, Kentucky admitted into the Union.
Washington reëlected President; John Adams Vice President.
1793. Washington laid the cornerstone for the national capitol.
The cotton-gin invented by Eli Whitney.
1794. Whisky Insurrection in Pennsylvania.
1796. June 1, Tennessee admitted into the Union.
Dec. 19, Washington made his farewell address.
1797. March 4, John Adams inaugurated President; Thomas Jefferson Vice President.
1798. Washington reappointed commander in chief; war with France threatened.
1799. Dec. 14, death of Washington.
1800. Seat of government removed from Philadelphia to Washington, D. C.
May 13, disbanding of the provisional army.
June 1, second United States census; population, 5,308,483.
Imports in 1800, $91,252,768; exports, $39,130,877.
1801. March 4, Thomas Jefferson inaugurated President; Aaron Burr Vice President.
1802. July 20, Louisiana ceded to France by Spain.
1803. Feb. 19, Ohio admitted into the Union.
April 30, Louisiana purchased of France for $15,000,000.
August, Commodore Preble bombarded Tripoli.
1804. July 11, Alexander Hamilton killed by Aaron Burr in a duel.
Jefferson reëlected President; George Clinton Vice President.
1805. June 3, treaty of peace with Tripoli.
1806. Expedition of Lewis and Clark to the Columbia River.
1807. May 22, trial of Aaron Burr for treason.
June 22, attack on the frigate *Chesapeake.*
Nov. 11, British orders in council, prohibiting all neutral nations from trading with France or her allies, excepting upon a payment of tribute to England.
Dec. 17, Bonaparte's Milan Decree, confiscating all vessels submitting to search by an English ship, or paying the above tribute.
Dec. 22, embargo laid by the United States government.
Steamboat invented by Robert Fulton, with which he ascended the Hudson on Sept. 14.
1808. Jan. 1, the slave trade abolished.
1809. March 1, the embargo repealed.
March 4, James Madison inaugurated President; George Clinton Vice President.
1810. June 1, third United States census; population, 7,239,881.
Imports in 1810, $85,400,000; exports, $24,391,295.
1811. May 16, engagement between the *President* and *Little Belt.*
Nov. 7, Battle of Tippecanoe; Harrison defeated Tecumseh.
1812. April 3, embargo laid for ninety days.
April 30, Louisiana admitted into the Union.
June 19, war declared by United States against England.
Aug. 15, surrender of General Hull at Detroit.
Aug. 19, capture of the frigate *Guerriere,* Captain Dacres, by the frigate *Constitution,* Captain Hull.
Oct. 13, defeat of the Americans at Queenstown.
Oct. 18, capture of the British brig *Frolic* by the United States sloop *Wasp.*
Oct. 25, capture of the British frigate *Macedonian* by the frigate *United States,* Captain Decatur.
Madison reëlected; Elbridge Gerry Vice President.
Dec. 29, victory over the British frigate *Java* by the *Constitution,* Captain Bainbridge.
1813. Feb. 25, the *Hornet,* Captain Lawrence, captured the British sloop *Peacock.*
April 27, capture of York, Canada.
May 27, Battle of Fort George.
June 1, capture of the frigate *Chesapeake,* Captain Lawrence, by the British frigate *Shannon.*
Aug. 14, American sloop *Argus* taken by the British sloop *Pelican.*
Sept. 10, Commodore Perry's victory on Lake Erie.
Oct. 5, Battle of the Thames; Tecumseh was slain.
Dec. 13, Buffalo burned.
1814. March 28, action between the frigates *Essex* and *Phoebe;* the former captured.
July 5, Battle of Chippewa; Americans victorious.
July 25, Battle of Bridgewater, or Lundy's Lane; British defeated.
Aug. 9-11, Stonington bombarded.
Aug. 25, the British occupied the city of Washington and burned the capitol.

YEAR.

1814. Sept. 11, McDonough's victory on Lake Champlain.
Sept. 12, battle near Baltimore and bombardment of Fort McHenry.
Dec. 24, treaty of peace with England signed at Ghent.
1815. Jan. 8, Battle of New Orleans; Americans victorious.
Feb. 17, Treaty of Ghent ratified by the President.
March, war declared with Algiers.
1816. Dec. 11, Indiana admitted into the Union.
1817. March 4, James Monroe inaugurated President; Daniel Tompkins Vice President.
July 4, work was begun on the Erie Canal.
Dec. 10, Mississippi admitted into the Union.
1818. Dec. 3, Illinois admitted into the Union.
First steamship sailed for Europe.
1819. Feb. 22, Florida ceded to the United States by Spain.
Dec. 14, Alabama admitted into the Union.
1820. March 3, Missouri Compromise passed by Congress.
March 15, Maine admitted into the Union.
Cession of Florida to the United States ratified by Spain.
June 1, fourth United States census; population, 9,633,822.
Imports in 1820, $74,450,000; exports, $18,008,029.
Immigration from 1789 to 1820 estimated at 250,000.
1821. Gas first used for lighting streets in the United States, at Baltimore.
July 1, Jackson took possession of Florida.
Aug. 10, Missouri admitted into the Union.
First settlement in Liberia.
1823. The Monroe Doctrine announced.
1824. March 13, convention with Great Britain for the suppression of the slave trade.
April 5, convention with Russia in relation to the northwest boundary.
Aug. 13, arrival of General Lafayette, to visit the United States.
1825. March 4, John Quincy Adams inaugurated President; John C. Calhoun Vice President.
Sept. 7, departure of Lafayette.
Oct. 6, Erie Canal completed.
1826. July 4, John Adams and Thomas Jefferson died.
1828. Construction commenced on the Baltimore and Ohio Railroad.
1829. Feb. 20, resolutions passed by the Virginia house of delegates, denying the right of Congress to pass the tariff bill.
March 4, Andrew Jackson inaugurated President; John C. Calhoun Vice President.
Sept. 15, slavery abolished in Mexico.
First locomotive imported from England for the Carbondale and Honesdale Railroad.
Dec. 4, revolution commenced in Mexico.
1830. Jan. 20, General Bolivar resigned his military and civil commissions.
Jan. 27, city of Guatemala nearly destroyed by earthquakes.
April 4, Yucatan declared its independence.
June 1, fifth United States census; population, 12,866,020.
Imports in 1830, $70,876,920; exports, $14,387,479.
The "Book of Mormon" was published.
1831. Jan. 12, remarkable eclipse of the sun.
Oct. 1, free trade convention at Philadelphia.
Oct. 26, tariff convention at New York.
1832. Feb. 6, attack on Qualla Battoo in Sumatra by the United States frigate *Potomac*.
March 11, states' rights convention of South Carolina.
May 16, Santa Anna inaugurated president of Mexico.
June 8, cholera broke out at Quebec, its first appearance in America.
Aug. 27, capture of Black Hawk.
Sept. 26, University of New York organized.
Nov. 19, nullification in South Carolina.
Dec. 28, John Caldwell Calhoun resigned the office of Vice President.
Electro-magnetic telegraph invented by Professor Morse.
1833. March 1, new tariff bill signed by the President.
March 4, Andrew Jackson inaugurated President for a second term; Martin Van Buren Vice President.
Oct. 1, public deposits removed from the Bank of the United States by order of President Jackson.
Nov. 13, remarkable meteoric showers in the United States.
1834. March 28, vote of censure by the Senate against President Jackson, for removing the deposits. (Expunged soon after.)
1835. April 18, French indemnity bill passed the chamber of deputies.
Dec. 16, great fire in New York.
Seminole War in Florida begun.
Samuel Colt patented revolving firearms.
1836. April 21, Battle of San Jacinto in Texas.
June 15, Arkansas admitted into the Union.

YEAR.

1836. Dec. 15, the general post office and patent office at Washington burned.
1837. Jan. 26, Michigan admitted into the Union.
March 4, Martin Van Buren inaugurated President; Richard M. Johnson Vice President.
1840. Jan. 19, Antarctic continent discovered by the United States exploring expedition.
June 1, sixth United States census; population, 17,069,453.
Imports for 1840, $107,141,519; exports, $18,190,312.
June 30, subtreasury bill became a law.
1841. March 4, William Henry Harrison inaugurated President.
The Union Act became a law, whereby Upper Canada and Lower Canada were united under a responsible government.
April 4, death of General Harrison; John Tyler became President.
Aug. 9, subtreasury bill repealed.
Aug. 18, bankrupt act became a law.
1842. March 3, bankrupt act repealed.
Dorr's Rebellion in Rhode Island.
Contest for the extension of suffrage in Rhode Island.
June 17, Bunker Hill monument celebration.
Aug. 9, Treaty of Washington negotiated by Daniel Webster and Lord Ashburton, defining our northeastern boundary, and for suppressing the slave trade and giving up fugitive criminals.
1844. Jan. 6, the magnetic telegraph first used practically between Baltimore and Washington.
June 15, the process of vulcanizing India rubber patented by Charles Goodyear.
June 27, death of Joseph Smith; succeeded as Mormon prophet by Brigham Young.
1845. March 1, Texas annexed to the United States.
March 3, Florida admitted into the Union.
March 4, James Knox Polk inaugurated President; George M. Dallas Vice President.
June 4, Mexico declared war against the United States.
Dec. 29, Texas admitted into the Union.
Treaty with China.
1846. May 8, Battle of Palo Alto; Taylor defeated the Mexicans.
May 9, Battle of Resaca de la Palma, on the Rio Grande.
May 13, proclamation of war against Mexico.
June 18, the Senate advised the President to confirm the treaty with Great Britain, settling the boundary of Oregon on the forty-ninth parallel.
July 28, new tariff bill passed.
Aug. 3, President Polk vetoed the river and harbor bill.
Aug. 6, revolution in Mexico in favor of Santa Anna.
Aug. 8, President Polk vetoed the French spoliation bill.
Aug. 18, General Kearny took possession of Santa Fé.
Aug. 19, Commodore Stockton blockaded the Mexican ports on the Pacific.
Sept. 10, the sewing machine patented by Elias Howe.
Sept. 20 to 24, storming of Monterey, and surrender of General Ampudia.
Sept. 26, California expedition with Colonel Stevenson's regiment of 780 officers and men sailed from New York.
Oct. 25, Tabasco in Mexico bombarded by Commodore Perry.
Nov. 14, Commodore Conner took Tampico.
Dec. 6, General Kearny defeated the Mexicans at San Pasqual.
Dec. 25, Colonel Doniphan defeated the Mexicans at Brazito, near El Paso.
Dec. 28, Iowa admitted into the Union.
1847. Jan. 8 and 9, battles of San Gabriel and Mesa in California; General Kearny defeated the Mexicans.
Jan. 14, revolt of the Mexicans in New Mexico against the United States authorities.
Jan. 24, Battle of Canada, in New Mexico; the Americans under Colonel Price were successful.
Feb. 22 and 23, Battle of Buena Vista; Americans victorious.
Feb. 28, Battle of Sacramento; Colonel Doniphan and 924 Americans defeated 4,000 Mexicans.
March 1, General Kearny declared California a part of the United States.
March 29, city and castle of Vera Cruz taken by the army and fleet under General Scott and Commodore Perry.
April 2, Alvarado taken by Lieutenant Hunter.
April 18, Battle of Cerro Gordo; Americans victorious. Tuspan taken by Commodore Perry.
Aug. 20, battles of Contreras and Churubusco.
Sept. 8, General Worth stormed Molina del Rey.
Sept. 13, storming of the citadel of Chapultepec.
Sept. 14, the American army entered the City of Mexico.
Sept. 13 to Oct. 12, siege of Puebla, held by the Americans against the Mexicans; the latter were repulsed by the former under Colonel Childs.
Oct. 9, the city of Huamantla taken by the Americans under General Lane.
Oct. 20, port of Guayamas bombarded and captured by the Americans.

YEAR.

1847. Dec. 31, the several Mexican states occupied by the American army placed under military contributions.

1848. January, gold discovered in California.
Feb. 18, General Scott relinquished the command in Mexico to General Butler.
Feb. 23, John Quincy Adams expired in the capitol at Washington.
May 29, Wisconsin admitted into the Union.
May 30, treaty of peace between the United States and Mexico was approved, which had been signed at Guadalupe Hidalgo, Feb. 2, 1848. It was proclaimed in the United States, July 4, 1848.
July 4, cornerstone of a monument to General Washington laid at Washington; oration by Robert C. Winthrop, speaker of the House of Representatives.
Aug. 13, Oregon territorial bill, with a prohibition of slavery, passed by Congress.
Dec. 8, first deposit of California gold in the mint.

1849. March 5, inauguration of Zachary Taylor as President; Millard Fillmore Vice President.
Aug. 11, President Taylor issued a proclamation against the armed expedition to aid Cuba.
Rush of gold seekers to California.
Aug. 31, convention of delegates, called by General Riley, of the United States army, to frame a State constitution for California, met at Monterey.
Nov. 19, the survey of the boundary line between Pennsylvania, Delaware, and Maryland, comprising the greater part of Mason and Dixon's line, was completed.

1850. Feb. 12, the original manuscript of Washington's farewell address was sold at auction, by the heirs of Mr. Claypole, printer, and purchased by James Lenox, of New York, for $2,300.
Feb. 22, President Taylor attended the laying of the cornerstone of the Virginia monument to Washington at Richmond.
April 27, the Collins line of steamers went into operation; the *Atlantic* sailed from New York for Liverpool.
May 23, two vessels, the *Advance* and the *Rescue,* fitted out by Henry Grinnell, of New York, to search for Sir John Franklin in the Arctic seas, sailed from New York.
June 1, seventh United States census; population, 23,191,876.
Imports for 1850, $178,138,318; exports, $14,951,808.
July 9, death of President Taylor; Fillmore became President.
Sept. 9, California admitted into the Union, and the territories of Utah and New Mexico organized.
Sept. 18, fugitive slave bill passed.
Sept. 20, act passed for the suppression of the slave trade in the District of Columbia.
Sept. 17, death of James Fenimore Cooper.

1851. Dec. 24, the congressional library destroyed by fire, with loss of about 35,000 volumes.

1853. March 4, Franklin Pierce inaugurated President; W. R. King Vice President.
July 2, Koszta affair at Smyrna; Captain Ingraham demanded Koszta's release.

1854. Feb. 28, the American mail steamer *Black Warrior* seized at Havana.
March 23, commercial treaty concluded between Japan and the United States by Commodore Perry.
May 31, Kansas-Nebraska bill was passed.
July 13, American sloop *Cyane,* Captain Hollins, bombarded San Juan de Nicaragua, or Greytown.
Aug. 2, reciprocity treaty with Great Britain ratified, respecting the Newfoundland fisheries, international trade, etc.

1855. Trouble in Kansas.
July, dispute with the British government concerning the attempt to recruit for the Crimean army in the United States.
Dec. 23, British discovery ship *Resolute,* abandoned in the Arctic seas by her officers and crew, was brought into New London by a whaler.

1856. Jan. 23, the Collins steamer *Pacific,* Capt. Asa Eldridge, left Liverpool for New York, and was never heard from afterward.
April 11, the great bridge across the Mississippi at Rock Island completed, and locomotives passed from the Illinois to the Iowa side.
May 22, Charles Sumner, Senator from Massachusetts, violently assaulted in the Senate chamber at Washington by Preston S. Brooks, Representative from South Carolina.
Aug. 21, the famous Charter Oak at Hartford blown down.

1857. March 4, James Buchanan inaugurated President; J. C. Breckenridge Vice President.
March 6, Chief Justice Taney delivered the opinion of the Supreme Court in the famous Dred Scott Case.
Aug. 24, failure of the Ohio Life and Trust Company, at Cincinnati, for $7,000,000, causing a financial panic; 5,123 bankruptcies in the United States and Canada.
Sept. 15, Brigham Young forbade any armed force to enter Salt Lake City on any pretense, ordered the Mormon troops to hold themselves in readiness, and declared martial law.
Sept. 26, the Philadelphia banks suspended specie payments.
Oct. 14, the New York banks suspended specie payments.
Oct. 15, the Boston banks suspended specie payments.
Dec. 12, the New York banks resumed specie payments, and two days later the Boston banks.

YEAR.

1857. Dec. 14, the Utah army reached Fort Bridger, and encamped for the winter.

1858. May 11, Minnesota admitted into the Union.
Bytown (now Ottawa) made the capital of Canada.
Aug. 5, news of the successful laying of the Atlantic telegraph cable was received throughout the country with great demonstrations of joy. The cable was spliced in midocean July 29; the *Agamemnon* reached Valencia, Aug. 4, and the *Niagara,* Trinity Bay, Aug. 5.
Aug. 6, first message sent across the Atlantic telegraph cable, from Queen Victoria to President Buchanan.

1859. Feb. 10, treaty with Paraguay.
Feb. 14, Oregon admitted into the Union.
Vancouver organized as a crown colony of Great Britain.
May 11, Vicksburg convention resolved in favor of opening the slave trade.
Oct. 6, John Brown's seizure of Harper's Ferry; he was captured and hung Dec. 2.
First oil well was sunk on Oil Creek, Pa.
Discovery of silver (Comstock Lode) in Nevada.

1860. April 23, Democratic convention met at Charleston and nominated Douglas, and by a seceding portion renominated J. C. Breckenridge.
May 9, Bell and Everett nominated by the Constitutional Union party at Baltimore.
May 18, Lincoln nominated by Republican convention at Chicago.
June 1, eighth United States census; population, 31,443,321.
Aug. 5, Walker, the "fillibuster," landed in Honduras for the last time; was taken, and shot Sept. 12.
Sept. 20, the Prince of Wales reached the United States at Detroit; went to Chicago, Cincinnati, Washington, Richmond, New York; sailed from Portland, Oct. 20.
Dec. 20, South Carolina seceded, followed within six months by the ten other states south of Maryland and Kentucky.
Imports for 1860, $362,166,254; exports, $400,125,296.

1861. Jan. 29, Kansas admitted into the Union.
Feb. 4, the seceded states held a convention at Montgomery, Ala.; they called themselves Confederate States of America, and adopted a Constitution.
Feb. 14, Jefferson Davis made President of the Confederate States; they raised troops and armed for war.
March 4, Lincoln was inaugurated President; Hannibal Hamlin Vice President.
April 13, Fort Sumter surrendered after two days' bombardment by the Confederates, who seized all United States vessels, forts, mints, and other property in their states, except Forts Monroe, Taylor, Jefferson, and Pickens.
April 15, President Lincoln called out 75,000 volunteers to defend Washington against the Confederate forces in Virginia.
April 19, attack on the Massachusetts troops going through Baltimore to Washington.
June 10, an attack from Fortress Monroe on the Confederate battery at Big Bethel repulsed.
July 20, Confederate Congress met at Richmond.
July 21, the Battle of Bull Run lost by the United States forces under McDowell.
Aug. 10, Battle of Dug Springs, Mo., won by United States troops, but their leader, General Lyon, killed.
Aug. 29, Confederate forts at Hatteras Inlet and 700 troops taken by United States fleet.
Aug. 31, General Frémont issued proclamation freeing slaves in Missouri.
Sept. 10, Rosecrans defeated the Confederates under Floyd at Carnifex Ferry, Va.
Sept. 20, Colonel Mulligan surrendered Lexington, Mo., to the Confederates.
Oct. 3, Battle of Green Briar, Va.; Confederates defeated.
Oct. 16, Lexington, Mo., recaptured by Union troops.
Oct. 21, Battle of Ball's Bluff, Va.; Colonel Baker killed, and Unionists defeated.
Nov. 1, General McClellan made general in chief to succeed General Scott.
Nov. 2, Frémont removed and Hunter succeeded him in Missouri.
Nov. 7, Union fleet bombarded and carried Confederate works at Port Royal, S. C. Battle of Belmont, Mo.; General Grant attacked the Confederates, but was repulsed.
Nov. 8, Captain Wilkes in the *San Jacinto* took Slidell and Mason out of the *Trent.*
Nov. 9, General Halleck placed over department of the West, and General Buell in Kentucky.
Nov. 24, Mason and Slidell placed in Fort Warren.
Nov. 30, Jefferson Davis elected President of the Confederate States; A. H. Stephens Vice President.
Dec. 4, John C. Breckenridge expelled from United States Senate by unanimous vote.
Dec. 12, great fire at Charleston, S. C.; one-third of the city burned.
Dec. 18, General Pope defeated with great loss at Shawnee Mound, Mo.
Dec. 20, Battle of Drainesville; General McCall defeated the Confederates.
Dec. 30, Slidell and Mason surrendered, on the justifiable demand of England.
Dec. 31, suspension of specie payment.

1862. Jan. 10, Battle of Middle Creek, Ky.; General Garfield defeated H. Marshall.
Jan. 11, Burnside's expedition left Fortress Monroe for North Carolina.
Jan. 13, Simon Cameron, Secretary of War, resigned; Edwin M. Stanton appointed his successor.

YEAR.

1862. Jan. 30, Ericsson's *Monitor* launched at Green Point, L. I.
Feb. 6, Fort Henry, on Tennessee River, taken by Commodore Foote.
Feb. 16, General Grant captured Fort Donelson with over 13,000 prisoners.
March 6-8, Battle of Pea Ridge, Ark.; Federal victory.
March 9, the *Monitor* engaged and drove off the *Merrimac,* saving the *Minnesota.*
March 23, Battle of Winchester, Va.; Confederates defeated.
April 6-7, Battle of Shiloh or Pittsburg Landing; Confederates gained first day, but were defeated on the second, losing 20,000; General Johnston killed.
April 7, Island No. 10 surrendered to Pope, after 23 days' siege.
April 11, Fort Pulaski captured by the Federals after thirty hours' bombardment.
April 28, New Orleans surrendered to General Butler. Forts Jackson and Saint Philip surrendered the same day.
May 5, Battle at Williamsburg; Union victory.
May 25, Banks defeated at Winchester and retreated to Potomac River.
May 30, Halleck's troops occupied Corinth, Miss., the Confederates evacuating it.
May 31 and June 1, Battle of Fair Oaks or Seven Pines; result indecisive.
June 6, Memphis surrendered to Commodore Davis.
June 20, bill prohibiting slavery in the territories became a law.
June 26, Battle of Mechanicsville, both sides losing heavily, and Union troops retreating.
June 27, Battle of Gaines's Mill, Union troops crossing the Chickahominy at night.
June 30, battles of White Oak Swamp and Charles City Cross Roads.
July 1, Battle of Malvern Hill, last of the Seven Days' battles; Confederates checked. Total Union losses in seven days, 15,224.
July 11, General Halleck made general in chief of all the armies of the United States
July 29, the *Alabama* sailed from Liverpool.
Aug. 9, Battle of Cedar Mountain, Va.; Banks defeated with heavy loss.
Aug. 29 and 30, General Pope defeated in the Second Battle of Bull Run.
Sept. 4, Lee's army began to cross the Potomac at Poolesville, Md.
Sept. 14, Battle of South Mountain; Union victory.
Sept. 16 and 17, Battle of Antietam; Confederates defeated, losing 25,000.
Sept. 19, rebels retreated over the Potomac. Battle of Iuka; Union victory.
Sept. 24, writ of habeas corpus suspended in military cases.
Oct. 3-5, battles of Corinth, Miss.; Union victory.
Dec. 13, Battle of Fredericksburg; Confederate victory.
Dec. 29, first attack on Vicksburg.
Dec. 31, Battle of Stone River or Murfreesboro.

1863. Jan. 1, the Emancipation Proclamation issued by Lincoln.
Jan. 2, Battle of Murfreesboro; Union victory.
Feb. 25, act establishing national banks became a law.
May 1-17, Grant's campaign before Vicksburg.
May 1-5, Battle of Chancellorsville; Confederate victory.
May 18, Grant's troops took position round Vicksburg to begin the siege.
June 19, West Virginia admitted as a State.
July 1-3, Battle of Gettysburg; Lee defeated and retreated southward.
July 4, unconditional surrender of Vicksburg and 31,000 men.
July 9, Port Hudson with 7,000 men surrendered to General Banks. The Mississippi is opened.
July 13, Lee recrossed the Potomac into Virginia.
July 13-18, draft riots in New York City.
Aug. 16, Rosecrans began his march upon Chattanooga.
Sept. 7, Confederates evacuated forts Wagner and Gregg.
Sept. 19-20, Battle of Chickamauga; Rosecrans defeated by Bragg.
Nov. 24-25, Battle of Lookout Mountain and Missionary Ridge; Union victory.
Dec. 8, President Lincoln issued his amnesty proclamation.

1864. Jan. 25, Congress thanked Cornelius Vanderbilt for presenting the *Vanderbilt,* worth $800,000, to the United States.
March 3, Ulysses S. Grant was made lieutenant general.
March 17, General Grant assumed command of all the Union armies.
May 5-6, Battle of the Wilderness; indecisive.
May 6, Sherman advanced from Chattanooga, on his Atlanta campaign.
May 8-18, Battle of Spottsylvania Courthouse; indecisive.
June 3, Battle of Cold Harbor; Confederate victory.
June 19, the *Kearsarge* sank the *Alabama* off Cherbourg; Union victory.
July 20-28, Union victory in battles before Atlanta.
July 30, the Confederates under McCausland burned Chambersburg, Pa.
Aug. 5, Admiral Farragut entered Mobile Bay, defeating the Confederates.
Sept. 2, Sherman captured Atlanta, Ga.
Sept. 29, Union victory at Winchester, Va.
Oct. 29, "Sheridan's Ride" and Union victory at Cedar Creek, Va.
Oct. 31, Nevada admitted as a State.
Nov. 16, Sherman started from Atlanta on his "march to the sea."

YEAR.

1864. Dec. 21, Savannah, Ga., taken by General Sherman.

1865. Jan. 15, Fort Fisher, the last Confederate port, closed by Union victory.
Feb. 1, Sherman left Savannah on his march northward.
Feb. 18, Charleston, S. C., captured by the Union army.
Feb. 21, the Union army captured Wilmington, N. C.
March, Sheridan's raid on Lynchburg, Va.
April 3, Petersburg and Richmond taken by the Federals.
April 9, Lee surrendered with the remains of his army, 26,115 men.
April 11, Mobile captured by the Unionists.
April 13, the Unionists captured Raleigh.
April 14, President Lincoln assassinated at Washington, and Andrew Johnson became President.
April 26, Johnston and his army surrendered to Sherman.
April 29, Commercial restrictions removed between the North and the South.
May 11, Jefferson Davis captured at Irwinsville, Ga.
May 23-24, review of Grant's and Sherman's armies at Washington.
May 29, Johnson issued a proclamation of amnesty and pardon.
Dec. 18, Thirteenth Amendment to the Constitution was declared adopted.

1866. July 1, the national debt reached its highest point, $2,773,236,173.
The crown colony of Vancouver made part of the Province of British Columbia.

1867. March 1, Nebraska admitted as a State.
March 30, Alaska purchased of Russia for $7,200,000.
May 13, Jefferson Davis admitted to bail for $100,000.
July 1, Ontario, Quebec, Nova Scotia, and New Brunswick organized as the Dominion of Canada.

1868. Feb. 24, impeachment of President Johnson.
July 4, Johnson issued a full pardon and amnesty proclamation.
July 28, Fourteenth Amendment to the Constitution was declared adopted.
Nov. 3, U. S. Grant elected President; Schuyler Colfax Vice President.

1869. May 7, the Pacific railroad was completed.

1870. March 30, Fifteenth Amendment to the Constitution declared adopted.
June 1, ninth United States census; population, 38,558,371.
The Province of Manitoba was formed.
Rebellion in Manitoba and the Northwest Territories, led by Louis Riel.

1871. Oct. 8-10, great fire in Chicago; loss, $200,000,000.
The Ku-klux-klan in the South.
British Columbia made a part of the Dominion of Canada.

1872. Sept. 14, Alabama award concluded, giving the United States $15,500,000.
Nov. 9-10, great fire in Boston; loss, $70,000,000.
The Modoc Indian War.

1873. Sept. 18, failure of Jay Cooke & Co., Philadelphia, followed by a financial panic.
Prince Edward Island became a member of the Dominion of Canada.

1875. Exposure of the Whisky Ring.

1876. May to November, Centennial Exposition at Philadelphia.
June 25, General Custer and 277 troopers massacred by Sioux Indians.
Aug. 1, Colorado admitted as a State.

1877. A. Graham Bell invented the telephone.
The electoral commission decided in favor of the Republican presidential candidate.
March 4, R. B. Hayes inaugurated President; William A. Wheeler Vice President.
Great railroad strikes caused by lowering wages of the workmen.

1878. Feb. 21, act of Congress to remonetize silver.
The yellow fever epidemic in the Southern States and Mexico.

1879. Jan. 1, specie payment resumed by the United States.
Dec. 17, gold was sold at par in New York for the first time since January, 1862.
Captain Eads completed the improvements of the navigation of the Mississippi.

1880. June 1, tenth United States census; population, 50,155,783.
Dec. 20, introduction of electric street lighting in New York.
Imports for 1880, $760,989,056; exports, $852,780,577.

1881. March 4, James A. Garfield inaugurated President; Chester A. Arthur Vice President.
July 2, President Garfield shot by Charles J. Guiteau.
Sept. 19, death of President Garfield; Chester A. Arthur became President.

1882. March, great floods of the Mississippi, making 85,000 persons destitute.
March 22, the act prohibiting polygamy in Utah became a law.

1883. Feb. 20, President Arthur appointed the first civil service commission.
May 24, the Brooklyn bridge formally opened for traffic.
Letter postage reduced to two cents per half ounce.

1884. Dec. 16, opening of the Cotton Centennial Exposition at New Orleans.

1885. Feb. 21, dedication of the national monument erected to George Washington at Washington, D. C.
Indian and half-breed rebellion in the Territory of Saskatchewan.
March 4, letter postage reduced to two cents per ounce. Grover Cleveland inaugurated President; Thomas A. Hendricks Vice President.

YEAR.

1885. April 16, the New York Legislature established a public park at Niagara Falls; cost $1,400,000
May 15, first publication of the revised translation of the Old Testament.
Sept. 2, Chinese miners attacked at Rock Springs, Wyo., and fifty Chinamen killed.
Marked progress in civil service reform.

1886. Jan. 19, the presidential succession law went into effect.
May 4, anarchist riot in Haymarket, Chicago; dynamite bombs killed seven policemen and injured eighty-three persons.
Aug. 20, seven anarchists convicted of murder in Chicago.
Oct. 28, President Cleveland attended the unveiling of Bartholdi's statue of "Liberty Enlightening the World," the gift of the people of France, now in New York harbor.

1887. Jan. 21, the interstate commerce bill became a law.
July 2-3, anniversary of Battle of Gettysburg celebrated jointly by Union and Confederate veterans.
Sept. 15-17, centennial celebration of adoption of the Constitution at Philadelphia.
Nov. 14, execution of four of the Chicago anarchist murderers.

1888. Sept. 7, Chinese immigration prohibited by Congress.
Oct. 20, end of the first session of the Fiftieth Congress, after being in session 321 days.

1889. Feb. 1, Secretary of Agriculture made a cabinet officer.
March 4, Benjamin Harrison inaugurated President; Levi P. Morton Vice President.
April 22, lands in Oklahoma opened for settlement.
April 29 to May 1, centennial celebration of the inauguration of Washington.
May 31, the Johnstown flood, caused by a break in the dam of the Conemaugh Valley, Pa.
Oct. 2, the Pan-American congress convened in Washington.
Nov. 2, North and South Dakota admitted as states.
Nov. 8, Montana became a State.
Nov. 11, Washington admitted as a State.
Electricity came into extensive use to propel street cars.

1890. June 1, eleventh United States census; population, 62,622,250.
July 3, Idaho admitted into the Union.
July 10, Wyoming became a State, the first to have full woman suffrage.
Aug. 6, execution by electricity in Auburn, N. Y., the first on record.
Oct. 1, approval of the McKinley tariff bill.
Oct. 6, plural marriage forbidden by the Mormon Church.
Imports for 1890, $789,222,228; exports, $857,824,834.

1891. June 30, immigrants into the United States from 1820 to 1890 reported at 15,644,688, by the chief of the Bureau of Statistics, Treasury Department, coming principally from Denmark, 146,237; Switzerland, 174,333; China, 292,578; Scotland, 329,192; France 370,162; Russia and Poland, 396,353; Italy, 414,513; Austria-Hungary, 464,435; Norway and Sweden, 943,330; British North America, 1,029,083; England, 2,460,034; Ireland, 3,501,683; Germany, 4,551,719.
July 1, international copyright went into effect.
Behring Sea seal fishery controversy between the United States and England submitted to arbitration.

1892. April 12, the sum of $25,000 paid by the United States to Italy on account of three Italians lynched in New Orleans, March 14, 1891.
July 6, strike and bloodshed at the ironworks at Homestead, Pa.
Aug. 5, silver valued at $2,500,000 appropriated by Congress for memorial coins for the World's Columbian Exposition.
Louisiana refused to recharter the Louisiana Lottery.

1893. March 1, the envoys to Germany, Great Britain, France, and Italy raised to the rank of ambassadors.
March 4, Grover Cleveland inaugurated President; Adlai E. Stevenson Vice President.
May 1, President Cleveland formally opened the World's Columbian Exposition, Chicago.
Sept. 16, the Cherokee strip of 6,072,754 acres opened for settlement.
An amendment to the Constitution of Colorado granted full suffrage to women.

1894. April 29, the Commonweal army under Coxey reached Washington.
June 25, Pullman car and railway strike; Federal troops sent to Chicago.
Aug. 8, the United States officially recognized the Hawaiian republic.
Aug. 27, the modified Wilson tariff bill, including the income tax, became a law without the approval of the President.
Sept. 2, extensive forest fires in Wisconsin, Michigan, and Minnesota.
Nov. 5, the government issued $50,000,000 of bonds.

1895. Feb. 8, bonds amounting to $62,400,000 issued by the government.
May 20, the Supreme Court of the United States declared the income tax unconstitutional by a vote of five to four.
Oct. 24, a train from Chicago to Buffalo, 510 miles, ran 65 miles per hour, making the trip in eight hours, one minute, and seven seconds.

1896. Jan. 4, Utah became a State.
Feb. 5, the government issued $100,000,000 in bonds.
May 27, a cyclone at Saint Louis destroyed property valued at $25,000,000.
Nov. 12, settlement of the controversy regarding the boundary between Venezuela and British Guiana.

YEAR.

1897. Feb. 2, fire destroyed the capitol at Harrisburg, Pa.; loss, $1,000,000.
March 4, William McKinley inaugurated President; Garrett A. Hobart Vice President.
May 20, the Senate by a vote of 41 to 14 passed a resolution recognizing Cuban belligerency.
July 24, the Dingley tariff bill became a law.
Nov. 2, the Democrats elected Robert A. Van Wyck mayor of Greater New York.

1898. Jan. 1, the charter of Greater New York went into operation.
Feb. 15, the battleship *Maine* destroyed in Havana harbor.
April 19, Congress passed a resolution that the United States intervene to establish independence in Cuba.
April 25, Congress declared that war with Spain had existed since April 21.
May 1, destruction of the Spanish fleet in Manila harbor by Commodore Dewey.
June 7, the Trans-Mississippi Exposition opened at Omaha, Neb.
June 10, Cuba invaded at Guantanamo Bay, near Santiago.
Emilio Aguinaldo proclaimed president of the Philippines by native Tagals.
June 24, Battle of Guasimas; American victory.
July 1-2, battles of El Caney and San Juan, near Santiago.
July 3, the Spanish fleet under Admiral Cervera attacked by the Americans under Commodores Sampson and Schley at Santiago; American victory. The Spanish lost six war vessels, 350 men killed, 165 wounded, and 1,700 prisoners.
The American warship *Charleston* seized the island of Guam.
July 7, Hawaii formally annexed by the United States.
July 17, Gen. Josi Toral with 20,000 men surrendered Santiago to General Shafter.
Aug. 12, a peace protocol was signed at Washington by the Secretary of State for the United States and by the French ambassador for Spain.
Sept. 20, the Spanish began to evacuate Porto Rico.
Discovery of the Cape Nome, Alaska, gold fields.
Dec. 10, treaty of peace with Spain signed at Paris, by which Spain relinquished all claim to sovereignty over Cuba; ceded Guam and Porto Rico to the United States; and relinquished all claims to the Philippine Islands on the payment of $20,000,000.

1899. Jan. 1, the Spanish evacuated Cuba.
Feb. 4, the natives under Aguinaldo attacked the American defenses at Manila.
Cost of the war with Spain estimated at $130,000,000.
Feb. 6, treaty of peace between the United States and Spain ratified by the Senate, 57 senators voting for the treaty and 27 against it.
Dec. 2, Tutuilla, an island of the Samoan group, annexed to the United States.

1900. Jan. 6, the Senate ratified the Samoan treaty.
March 14, President McKinley signed the bill making gold the single monetary standard.
Boxers' rising in China; United States Minister Conger endangered.
June 1, twelfth United States census; population, 76,303,387.
June 17, the Taku forts, China, captured by the allied powers.
Sept. 8-9, great hurricane at Galveston, Tex.; 6,000 lives lost and $12,000,000 worth of property destroyed.
Imports for 1900, $927,780,824; exports, $1,499,164,875.

1901. March 4, President McKinley inaugurated for a second term; Theodore Roosevelt Vice President.
March 23, Emilio Aguinaldo taken prisoner by a United States force.
May 20, Pan-American Exposition at Buffalo was formally opened.
July 4, civil government inaugurated in the Philippines.
Sept. 6, President McKinley shot at Buffalo by Leon Czolgosz.
Sept. 7, peace protocol between China and the allied powers signed; the United States' award amounting to $7,000,000.
Sept. 14, death of President McKinley; Theodore Roosevelt took the oath of President.
Sept. 14, statue of John Ericsson unveiled at Stockholm, Sweden.
Nov. 13, Northern Securities Company incorporated in New Jersey with a capital of $400,000,000.
Dec. 6, the Hay-Pauncefote Nicaragua Canal Treaty ratified by the Senate.
Dec. 14, William Marconi telegraphed across the Atlantic by wireless telegraphy, from Saint John's, Newfoundland, to Poldhu, England.

1902. Feb. 19, President Roosevelt sustained the decision of the court of inquiry in the Schley-Sampson controversy, holding that there was no general command at Santiago, and that Sampson was in command technically.
Feb. 23 to March 11, Prince Henry of Germany made a tour of the United States, visiting New York, Chicago, Milwaukee, and Saint Louis.
May 8, the eruptions of Mont Pelée overwhelmed Saint Pierre, Martinique, causing the death of 30,000 people.
May 14, beginning of the great anthracite coal strike, in which 145,827 miners were directly involved.
May 20, the new constitution proclaimed in Cuba; Tomas Estrada Palma became the first president of the new republic.
Vast emigration from the United States to northwestern Canada.

YEAR.

1902. Oct. 21, agreement concluded to submit to a commission, appointed by President Roosevelt, the questions involved in the anthracite coal strike. Under this agreement the miners returned to work and President Roosevelt appointed as commissioners John M. Wilson, U. S. A.; Edward W. Parker, expert mining engineer; George Gray, U. S. Federal judge; E. E. Clark, railroad conductor; John Lancaster Spalding, Catholic bishop; Thomas H. Watkins, formerly in the coal-mining business; and Carroll D. Wright, commissioner of labor.

Oct. 22, the Danish landsthing refused to cede the islands of Saint Thomas, Santa Cruz, and Saint John for $5,000,000, which purchase was ratified by the United States Senate on Feb. 17, 1902.

December, Germany, England, and Italy blockaded the coast of Venezuela, owing to the nonpayment of claims by the latter country; the issues were referred to The Hague Tribunal for arbitration.

1903. Jan. 1, San Francisco and Honolulu permanently connected by a cable line, by the Commercial Pacific Cable Company.

Jan. 2, President Roosevelt ordered that the post office at Indianola, Miss., remain closed until the patrons are willing to accept Minnie M. Cox, colored, as post-mistress.

Feb. 14, the bill creating the Department of Commerce and Labor was signed by President Roosevelt.

Feb. 14, George Bruce Cortelyou (born 1862), of New York, nominated as Secretary of the new department of Commerce and Labor.

March 20, the greatest flood of the Mississippi River ever known; the height of the water at New Orleans was 19.8 feet.

April 22, the government of President Vasquez in San Domingo overthrown by revolutionists, and a provisional government established under A. Wos-Gil.

April 30, President Roosevelt and ex-President Cleveland made addresses at the dedication exercises of the Louisiana Purchase Exposition, in Saint Louis, Mo.

June 30, the government reports for the fiscal year placed the exports at $1,419,991,290; imports, $1,025,619,127.

July 4, the first telegraphic message around the world is sent in nine minutes over the new Pacific cable, from San Francisco to Manila, by President Roosevelt at Oyster Bay.

Oct. 20, the Alaskan boundary tribunal rendered a decision by which the United States retains all its present Alaskan territory, shutting Canada away from the sea along the entire length of the Alaskan panhandle, except at the southern extremity, where a small strip gives the Dominion control of the Portland Canal and its islands which overlook Port Simpson, the terminus of the Great Trunk Pacific Railroad. The boundary line runs ten leagues inland and is measured from the heads of the inlets, and the territory thus left along the coast is a continuous strip, which is in accordance with the purchase by the United States from Russia in 1867.

Nov. 7, revolution in Panama, Central America, owing to the government of Colombia having rejected the Panama Canal Treaty, and the new republic of Panama was recognized by the United States.

Dec. 30, fire in the Iroquois Theater in Chicago caused the death of nearly 600 people.

1904. Feb. 7-8, fire in Baltimore destroyed 75 blocks, causing a loss of $80,000,000.

March 30, the steamship *Nebraska*, an American vessel, completed the voyage from San Diego, Cal., to New York, a distance of 12,724 nautical miles, having used only crude oil as fuel.

May 7, Leslie M. Shaw, Secretary of the Treasury of the United States, signed a warrant for $40,000,000 in payment of the French company for the Panama Canal property.

June 15, the steamer *General Slocum*, carrying an excursion of Saint Mark's Lutheran Church, caught fire in the East River, New York, and about 900 lives were lost, most of the victims being women and children.

June 23, Theodore Roosevelt (born Oct. 27, 1858) and Charles W. Fairbanks (born May 11, 1852) nominated by the Republican national convention at Chicago for President and Vice President respectively.

July 9, Alton Brooks Parker (born May 14, 1852) nominated for President, and Henry G. Davis (born Nov. 16, 1823) nominated for Vice President by the Democratic national convention at Saint Louis.

1905. Jan. 14, John Hay, Secretary of State, in a note to Russia emphasized the suggestion that hostilities in the war with Japan be localized and restricted to as small an area as possible, and that the neutrality and entity of China should be respected.

March 4, Theodore Roosevelt inaugurated President; C. W. Fairbanks, Vice President.

Aug. 5, first formal meeting of M. Witte and Baron Rosen, Russian envoys, with Baron Komura and Minister Takahira, Japanese envoys, at Portsmouth, N. H., where the sessions of the Russo-Japanese Peace Conference were held.

Nov. 28, Secretary Root decided that the Isle of Pines belongs to Cuba, and recommended that the Americans there should respect the sovereignty of the Cuban republic.

Alberta and Saskatchewan admitted as provinces into the Dominion of Canada.

Dec. 25, general insurrection in Santo Domingo. President Morales was compelled to leave the capital and subsequently was impeached by congress.

YEAR.

1906. April 3, a large majority at the Chicago municipal election voted to acquire the street railway properties, but the proposition to operate them failed of a two-thirds majority.
April 18, at fifteen minutes past five in the morning the coast region of California was visited by a destructive earthquake. The greatest damage was done at San Francisco, where a thousand lives were lost and $300,000,000 worth of property was destroyed.
Aug. 6, the Pan-American Conference convened at Rio Janeiro, Brazil, at which Secretary Root attended as representative from the United States.
Sept. 29, Secretary Taft proclaimed the intervention of the United States for the purpose of suppressing the rebellion in Cuba. Subsequently the rebel forces disbanded and Charles E. Magoon was placed in charge as provisional governor, President Palma having resigned his office.
Nov. 6, the proposition of Congress, that the territories of New Mexico and Arizona be united to form a single State, provided a majority of the electors of each Territory favor such organization, was rejected by a large majority in Arizona.
Nov. 6, Indian Territory and Oklahoma having been admitted in 1906 as the State of Oklahoma, the new State held its first general election of State officers and congressmen and chose delegates to the State constitutional convention.
Nov. 8, the first authentic report was published giving an account of Robert Edwin Peary's Arctic expedition. The explorer reached the farthest point north, the latitude of 87° 6', about 59 miles beyond Nansen's record of 1895 and within 200 miles of the north pole.
Dec. 18, the United States House of Representatives voted unanimously to retain the old standard of spelling instead of adopting the simplified standard of spelling 300 words as recommended by President Roosevelt.

1907. April 27, the Jamestown Ter-Centennial Exposition, in which thirty states and twenty foreign nations participated, was formally opened at and near Hampton Roads in the state of Virginia as proclaimed by President Roosevelt.
July 29, William D. Haywood, secretary and treasurer of the Western Federation of Miners, found not guilty at Boise, Idaho, after an extended trial on an indictment charging him with conspiracy in the murder of Gov. Frank Steuenberg.
Aug. 1, Walter Wellman announced that he was ready to start in his polar airship, the *America,* from Spitzbergen for the North Pole, a distance of 618 sea miles.
Aug. 3, Judge Kenesaw Mountain Landis, of the United States district court at Chicago, assessed the maximum fine of $29,240,000 against the Standard Oil Company after that corporation was convicted on 1,462 counts for rebating.

1908. April 21, Frederick A. Cook discovered the North Pole.
Nov. 3, William Howard Taft elected President and James Schoolcraft Sherman elected Vice President over their Democratic opponents, William Jennings Bryan and John Worth Kern (born Dec. 20, 1849). The total vote cast was 14,876,718, of which the Republican candidates received 7,677,021 votes and the Democratic candidate received 6,405,182 votes.

1909. March 4, William Howard Taft and James Schoolcraft Sherman inaugurated President and Vice President at Washington, D. C.
April 6, Robert E. Peary, after a hazardous voyage, made partly by the *Roosevelt* and partly by sledges, reached the North Pole.
June 1, the Alaska-Yukon Exposition formally opened at Seattle, Wash., in which Canada, the United States, and many other nations participated.
Oct. 12, a great hurricane swept over Cuba and the Gulf of Mexico, during which Key West, Fla., and other cities suffered much damage.
Oct. 16, President Taft and President Diaz met at Ciudad Juarez, in Mexico, for a consultation and to exchange greetings.

1910. March 30, President Taft issued a proclamation granting minimum tariff rates to Canada and Australia, thereby completing the extension of minimum tariff rates to the entire world.
June 16, Congress passed the law providing conditions to admit Arizona and New Mexico.
Sept. 12, Frederick W. Plaisted was elected Governor of Maine, being the first Democrat elected to that office in Maine for thirty years.
Oct. 17. Walter Wellman and four companions started on the famous trip across the Atlantic Ocean from the United States to Europe in a dirigible balloon.

1911. Postal savings banks established.
Reciprocity in trade proposed between Canada and the United States.
Congress investigated charges of fraud in the election of William Lorimer, of Illinois, to the United States Senate.
Panama Canal Exposition located at San Francisco (in 1915).
Troops sent to the Mexican border to protect American interests during the Mexican revolution
President Diaz resigned as president of Mexico and sailed to Europe.
June 9, Carrie Nation died (born in 1846).
Reciprocity is defeated at the election in Canada and Sir Laurier is succeeded as Premier by Sir Borden (q. v.).
Philander Priestly Claxton (born Sept. 28, 1862) appointed United States commissioner of education.

YEAR.

1912. New Mexico and Arizona admitted as States.

March 16, the battleship Maine sunk with imposing ceremonies.

April 14, the trans-Atlantic liner Titanic collided with an iceberg off the coast of Newfoundland with 2340 persons on board, of whom only 745 were saved, making the loss 1595 lives

June 22, William Howard Taft and James Schoolcraft Sherman renominated, respectively, for President and vice-President at the Republican national convention in Chicago.

July 2, Woodrow Thomas Wilson and Thomas Riley Marshall (born Mar. 14, 1854) nominated by the Democrat convention at Baltimore for President and vice-President, respectively.

Aug. 7, Theodore Roosevelt and Hiram W. Johnson (born Sept. 2, 1866), nominated, respectively, by the Progressive party, for President and vice-President.

Oct. 30, Death of James Schoolcraft Sherman, vice-President of the United States.

Nov. 5, Woodrow Thomas Wilson and Thomas Riley Marshall elected President and vice-President, respectively, of the United States. The total vote cast was 15,141,415, of which the Democrat candidates received 6,292,599 votes, the Progressive candidates received 4,190,101 votes, the Republican candidates received 3,481,632 votes, the Socialist candidates received 923,086 votes, the Prohibition candidates received 228,566 votes, and the Social Labor candidates received 25,431 votes.

1913. Jan. 1, Parcel Post Law went into effect. The act of Congress authorizing the establishment of a parcel post system provides that fourth class mail matter shall embrace all other matter, including farm and factory products, not now embraced by law in either the first, second, or third class.

Feb. 23, Francisco I. Madero, President of Mexico, shot after being imprisoned and tortured in the National Palace.

Great activity in the building of railways in Canada, including the transcontinental lines and the project to connect these lines by branches with Hudson Bay.

The Sixteenth Amendment to the United States Constitution, which authorizes taxes on incomes, was ratified by the requisite number of States.

Mar. 4, Woodrow Thomas Wilson and Thomas Riley Marshall inaugurated President and vice-President at Washington, D. C.

April, great floods in the valley of the Ohio and the lower valley of the Mississippi.

Ratification of the change in the Constitution which requires that United States Senators shall be elected by direct vote of the people.

The Republic of China recognized by the United States.

Special session of Congress at which the Underwood Tariff Bill was the chief center of interest, revising the tariff downward, and the Income Tax Law was enacted.

Railroad building in Alaska undertaken on a larger scale by the United States Government.

The Canadian government adopted a measure which authorizes the construction of three dreadnaughts at a cost of $35,000,000 as a contribution to the imperial navy of Great Britain.

May 8, Gen. Carranza and the Constitutionalists secured control of northern Mexico.

Nov. 6, Gen. Huerta notified by President Wilson that he must resign the presidency of Mexico.

Nov. 25, the revolutionists captured the city of Juarez.

1914. April 2, the organization committee announced the following twelve banking cities as seats for Federal Reserve Banks; Boston, New York, Philadelphia, Cleveland, Richmond, Atlanta, Chicago, St. Louis, Minneapolis, Kansas City, Dallas and San Francisco (see map).

Gen. Villa captured the city of Torreon after a hard-fought battle.

April 20, Congress of the United States authorized the President to use armed force to secure order in Mexico.

April 21, President Wilson ordered Rear-Admiral Fletcher to seize the custom house and stores of ammunition at Vera Cruz.

May 1, an agreement was concluded to submit the issues between Mexico and the United States to meditation before representatives of the republics of Argentine, Brazil and Chili. Niagara Falls, Ontario, was selected for the seat of the board of mediators.

1915. March 25, the United States submarine *F-U* sunk accidentally to the bottom, about 300 feet, in the harbor of Honolulu.

March 18, President Wilson reviewed the great United States fleet in the Hudson River.

June 8, William Jennings Bryan, Secretary of State, resigned from the cabinet, being out of agreement with President Wilson in his policy toward Germany, and immediately began his lecture tour for peace.

June 23, Robert Lansing appointed Secretary of State by President Wilson to succeed William Jennings Bryan.

Aug. 4, official figures state that the number of immigrants for the year ending June 30, 1915, is 326,000, the smallest number since 1899. See War.

YEAR.

1916. Jan. 25, the excess of exports over imports in the United States for 1915 reported at $1,772,305,538, as compared with the former average of $450,000,000.
Feb. 3, the Canadian Parliament building destroyed by fire.
March 10, a force of United States troops sent into Mexico to punish General Villa for his raids across the border.
June 9, Charles Evans Hughes and Charles Warren Fairbanks nominated for President and Vice President by the Republicans.
June 16, Woodrow Wilson and Thomas R. Marshall renominated for President and Vice President by the Democrats.
June 20, hostilities occurred between the United States troops and Mexican soldiers.
Aug. 23, the first merchant submersible to cross the Atlantic, the *Deutschland,* reached Baltimore from Bremerhaven, making the voyage in three weeks.
Oct. 7, the German submarine *U-53* arrived at Newport, R. I., and, after remaining three hours, began her return trip to Europe. The next day she sank three British, one Dutch and one Norwegian vessels, outside the three-mile-limit, after giving warning.
Nov. 7, Woodrow Wilson and Thomas R. Marshall elected President and Vice-President, respectively, defeating the Republican nominees, Charles E. Hughes and Charles W. Fairbanks.
Nov. 24, in a protocol signed by Mexican and American commissioners at Atlantic City, N. J., the United States agreed to withdraw General Pershing and his army from Mexico within forty days.
Dec. 6, in the annual report of Secretary McAdoo, of the treasury department, it was declared that the United States on Nov. 1, 1916, had stock of gold in the treasury amounting to $2,700,136,978, the largest ever held by any country.

1917. Jan. 31, Germany declared that "from Feb. 1, 1917, sea traffic will be stopped with every available weapon and without further notice," in zones around Great Britian, France and Italy; American passenger ships will be undisturbed if they sail once a week, bear certain markings, take a prescribed course, land only at Falmouth, arrive on Sunday and depart on Wednesday and carry no contraband.
Feb. 3, diplomatic relations with Germany severed by the United States on the ground that the German government on January 31, 1917, withdraw the assurance given on May 4, 1916, that Germany would confine war operations to the fighting forces of the belligerents.
Feb. 4, President Wilson communicated to neutrals his opinion that it would make for the peace of the world if they take action against Germany similar to that taken by the United States.
Feb. 12, Germany proposed to discuss matters of difference with the United States, and the latter country refused unless Germany first withdraw from the proclamation of Jan. 31, 1917.
March 31, possession of the Danish West Indies turned over to the United States; these islands were renamed the Virgin Islands and James H. Olliver was made the first governor.
April 6, the House by a vote of 373 to 50 passed the Senate resolution (voted Apr. 4) declaring a state of war exists with Germany; President Wilson signed this joint resolution the same day.
April 21, the British mission, headed by Arthur J. Balfour, reached the United States from Canada.
May 9, the Canadian losses in the war up to May 8 are officially reported at 23,330 killed, 63,656 wounded, and 2857 missing, a total of 89,843.
May 11, Wheat reached $3.25 per bushel at Chicago, an advance from $1.29 on April 2.
May 18, President Wilson signed the selective draft conscription bill, providing that all men between 21 and 31 shall be subject to registration and selection, and announced that an army of 500,000 men would be conscripted and that a division of the regular army would be sent to France.
May 19, Herbert C. Hoover appointed Commissioner of Food Administration, with power to control food and food consumption.
May 23, the United States refused to grant passports to delegates to an international Socialist peace convention to be held at Stockholm, Sweden.
May 25, Major-General Goethals, recently appointed managing director of the Government ship-building activities, reported in favor of building steel ships rather than wooden vessels.
May 31, a total of 92,686 men enlisted during the recruiting of two months, approximating half of the number required to bring the United States army up to full war strength of 293,000.
June 5, the registration of men between the ages of 21 and 31 years effected, the total number registering being nearly 10,000,000.
June 9, the total loans of the United States to the Allies reached $948,000,000, including loans of $500,000,000 to Great Britain.
June 13, General Pershing and his staff arrived in France, to study the war conditions and to prepare for the first expedition of American troops.
June 15, subscriptions for the first American war loans, called the "Liberty Loan of

YEAR.

1917. 1917" were closed, the amount subscribed exceeding the proposed sum of $2,000,000,000. June 15, the American commissions, headed by Elihu Root reached Petrograd, Russia, the objects being to prevent that country from making a separate peace with Germany and to establish closer relations with America.

July 9, President Wilson issued the proclamation, putting an embargo on fuel, steel, foodstuffs, and other necessities to all the countries of the world, except when license is issued to permit such exports.

July 20, by formal order of President Wilson, the drafting of 678,000 men, to be selected from those registering June 5, took place at Washington, D. C., bringing the combined armies of the nation up to 1,263,000 men.

Aug. 2, the transportation of troops from the United States to Europe commenced, these forces united in an army under General Pershing, on the western battle line, in France and Belgium.

Aug. 8, the Conscription Bill finally passed by the Parliament of Canada, making military service between the ages of twenty and thirty-two years compulsory.

Aug. 20, the American Commission to Russia, presided over by Elihu Root, returned to the United States and reported that, in the opinion of the Commission, Russian freedom would endure, but that the country was greatly in need of food, clothing and military supplies.

Sept. 15, the intensified interest shown throughout the United States and Canada in the upbuilding of relief and Red Cross work, for which large sums of money were raised.

1918. For the leading facts of the World War and events up to 1920, see page 728.

1920. Jan. 16, the Eighteenth Amendment to the United States Constitution, prohibiting the manufacture and sale of alcoholic beverages, became effective. Sharp decline in the exchange value of the money of all countries compared to values in the United States, including the money of Canada and England, the lowest value of the former being $0.79 per $1.00 and of the latter being $3.19 per pound sterling.

May 7, Venustiano Carranza, President of Mexico, fled from Mexico City, and after being captured, on May 20, was slain by Gen. Rodolfo Herrero.

May 27, Adolfo de la Huerta recognized as provisional president of Mexico.

June 8, Warren G. Harding and Calvin C. Coolidge were nominated at Chicago for President and Vice-President by the Republicans.

June 28, James M. Cox and Franklin D. Roosevelt were nominated at San Francisco for President and Vice-President by the Democrat national convention.

Aug. 26, the Nineteenth Amendment to the United States Constitution became effective, granting general woman's suffrage.

Nov. 2, the first election in which women participated in all the states resulted in the election of Warren G. Harding and Calvin C. Coolidge as President and Vice-President.

Oct. 7, official figures published of the Fourteenth Census of the United States placed the population at 105,683,108.

Dec. 1, Alvaro Obregon inaugurated President of Mexico, having been elected on Sept. 5.

1921. Mar. 4, Warren G. Harding and Calvin C. Coolidge inaugurated President and Vice-President, respectively, at Washington, D. C.

Mar. 10, an agreement was reached by Panama and Costa Rica whereby the boundary dispute, which had caused armed hostilities, was settled by arbitration.

April 20, the United States Senate approved the treaty with Colombia, awarding that country $25,000,000 damages in connection with the purchase of the Panama Canal Zone.

1922. April 1, the coal miners began a general strike against a reduction in the wage scale, involving nearly all the mines and about 550,000 mine workers.

Aug. 22, final adjustments made in the coal and other strikes, thereby restoring confidence.

1923. Mar. 15, the British government made the first payment to the United States of $4,128,085.74 in gold, under the terms of the British-American War Debt Funding Plan, leaving $4,600,000,000 still due.

Aug. 3. Calvin Coolidge took the oath of President of the United States, at Plymouth, Vt.

1924. Nov. 4, President Calvin Coolidge elected to succeed himself as President.

1926. Aug. 6, Gertrude Ederle, a German-American swimmer, crossed the English Channel in 14 hours and 34 minutes, being the first woman to accomplish that feat.

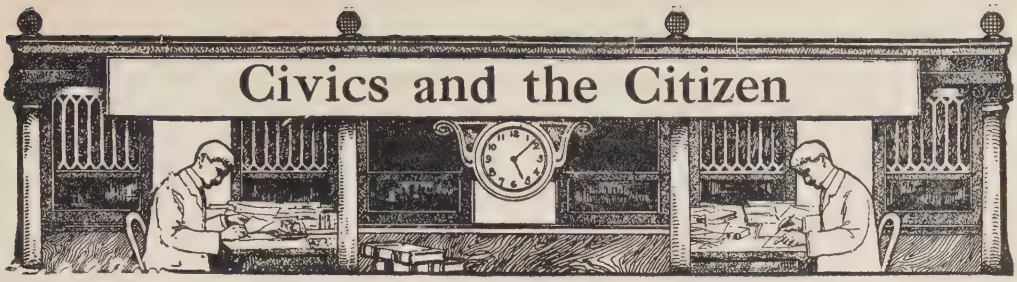
Sept. 18, storms in the West Indies and Florida, with the center of destruction at Miami, resulted in a loss of 364 lives, 2000 personal injuries, and $200,000,000 damage to property.

1927. May 27, Charles A. Lindbergh landed at Paris, France, after crossing the Atlantic in 33 hours and 29 minutes with the *Spirit of St. Louis*, a Bellanca airplane.

1928. Herbert C. Hoover and Charles Curtis elected as Republican candidates for President and Vice-President, defeating Alfred E. Smith and Joseph T. Robinson as Democratic candidates for President and Vice-President.

1929. Mar. 4, Herbert C. Hoover and Charles Curtis inaugurated, respectively, as President and Vice-President of the United States.

Special session of Congress called by President Hoover to consider farm relief and other measures.



What constitutes a State?
Not high raised battlement or labored mound,
Thick wall or moated gate;
Not cities proud with spires and turrets crowned;
Not bays and broad-armed ports,
Where, laughing at the storm, rich navies ride;
Not starred and spangled courts,
Where low-browed baseness wafts perfume to pride.
No,—MEN, high-minded men,
With powers as far above dull brutes endued
In forest, brake or den,
As beasts excel cold rocks and brambles rude—
Men who their duties know,
But know their rights, and knowing, dare maintain,
Prevent the long-aimed blow,
And crush the tyrant while they rend the chain.
These constitute a State.

—*Alcaeus. Tr. by Sir Wm. Jones.*

Definitions and Principles.

I. Society.

Society is an organization of men in human relations.

THE EVOLUTION OF SOCIETY.

1. Nomadic State.
2. Herdsmen.
3. Husbandmen.—Agriculture,
4. Manufacturers,
5. Traders.—Commerce.

> To the people we come sooner or later; it is upon their wisdom and self-restraint that the most cunningly devised scheme of government will in the last resort depend.—*Bryce.*

QUESTIONS.

1. In which of the above named states do property rights begin?
2. In which does real estate law begin?
3. Explain the sentence: "Might makes right."
4. How did our Teutonic ancestors inaugurate their chief?
5. What do civil institutions comprise?

WRITTEN EXERCISE.

1. Trace the influence of the differentiation of society on government.
2. Write a paper on "The First Stages of Society" and note the following Points: (a) Daily life. (b) Language. (c) Superstitions. (d) Forms of wealth. (e) Individual rights. (f) Morals and religion. (g) Government. (h) Examples of.

THEORIES OF THE ORIGIN OF SOCIETY.

1. Historical.

Man cannot exist in solitude; the union of the sexes is necessary for the perpetuation of the race. Families coming together form a village or tribe, and a union of tribes, or the expansion of a single tribe, forms the state. Thus, the family is the first step, the tribe is the second step, and the state the last step in social development. The state differs from the family and the tribe, therefore, in the number of its members, and in the number and nature of their relations — *Aristotle.*

2. The Contract or Compact Theory.

This theory, best expounded by Rousseau, maintains that men lived at one time in a free natural condition, every one doing as he pleased. But living in this way, in the long run, they suffered the want of those advantages that spring from society and government. Hence they agreed or contracted to enter into society and to establish a government.

3. The Theological Theory.

This theory maintains that the state is the immediate workmanship of God, and that government is an ordinance of God.

QUESTIONS.

1. Which theory may be termed the Social Theory? Natural Theory? Organic Theory? 2. Can one of the above theories be made to include the other two? Give the argument. 3. Which theory adopts evolution? 4. What is the meaning of Aristotle's dictum: "Man is born a citizen"? 5. Give two objections to the Compact Theory. 6. In what ways do Rousseau's religious and political views contradict each other? 7. "God ordained society, government, and the state when he gave to man his social nature." Could this statement be accepted by an advocate of any one of the theories given?

WRITTEN EXERCISE.

1. Express clearly *your* view concerning the origin of society.

II. The State.

A state is a particular portion of mankind viewed as an organized unit.

THE DEFINITION OF A STATE IMPLIES:

1. National or governmental unity.
2. Geographic or territorial unity.
3. Race unity or ethnic homogeneity.

QUESTIONS.

1. What argument is found in the above against foreign immigration? Against the acquisition of territory? 2. Explain how these elements played a part in the causes of the Civil War of 1861. 3. Name other wars in which these elements were factors. 4. To what extent were they formative principles in shaping the United States constitution? 5. What is meant by the "body politic"?

THE IDEA OF A STATE:

1. All comprehensive.
2. Exclusive.
3. Permanent.
4. Sovereign.

> The crowning fact, the kingliest act of freedom, is the freeman's vote.—*Whittier.*

QUESTIONS.

1. What is the social state? 2. What ratio does the number of persons in the social state bear to the political state? 3. Is there a "stateless person"? 4. Why is anarchy a permanent impossibility? 5. Louis XIV. said: *L'etat c'est moi* (I am the State). What idea of the state was enunciated? 6. Adam Smith in his *Wealth of Nations* viewed man as a citizen of the world. State an objection to this view. 7. Are the words *state* and *nation* synonymous? 8. Point out the difference between the word *state* as used in political science and its use in popular language. 9. Is Ohio viewed as a state in international law? Give reasons. 10. May we view a county or a city as *a state* from the point of view of Blackstone's definition of law? (Section V.)

WRITTEN EXERCISE.

1. Write a paper on "The State."

III. Sovereignty.

Sovereignty is the original, absolute, indivisible, and unlimited power of a state over the individual subject and over all associations of subjects.

QUESTIONS.

1. Must a state have the power to compel a subject to obey against his will? Illustrate.
2. Can you conceive of a state without sovereignty; *i. e.*, without unlimited power over its subjects?
3. State the distinction between sovereignty and despotism.
4. Is sovereignty higher than moral obligation?
5. "Back of the government lies the constitution; and back of the constitution lies the original sovereign state." Explain.

IV. Government.

Government is the organization of society to secure justice and progress.

THE FUNCTIONS OF GOVERNMENT.

1. To establish justice.
2. To provide for the common defense.
3. To promote the general welfare.
4. To insure domestic tranquillity.
5. To secure the blessings of liberty.

THE TYPES OF GOVERNMENT AS CLASSIFIED BY ARISTOTLE.

1. Monarchy.
2. Aristocracy.
3. Democracy.
4. Mixed.

QUESTIONS.

1. Define each type and give an example. 2. Give the etymology of each word. Give the etymology of the word *government*. 3. What is a despotism? 4. An oligarchy is a modification of which form? 5. Into which form may we conceive the patriarchal type to have merged? 6. Define theocracy. Give an example. 7. What is pure democracy? Does such a form exist? 8. Analyze the government of England, and point out the various forms in it. 9. Which form of government is most numerous in history? Why? 10. What forms of monarchial government exist? Distinguish between them.

11. Name the countries of Europe and the form of government in each. 12. Does the continent of Asia afford more than one type? 13. When may we say a government is bad? 14. Why is there very little meaning in the statement that the government of the United States is the best that exists? 15. "The test or essence of any government is its power to tax." Explain. 16. What is a representative democracy? 17. To determine the form of government of any state ask, "Where does the sovereignty reside?" Apply the question to different nations. 18. What is the distinction between a Federal Government and a Confederate Government? Apply the test of sovereignty. 19. What is the true basis of government for a people? 20. What is the distinction between the *state* and the *government?* 21. What are the objections to a pure democratic form of government? 22. From the point of view of Ethics, should every citizen pay taxes? Why? 23. Name the English Orders of Nobility. 24. What did the word *tyrant* mean in ancient Greek politics? 25. Define politics.

TYPES OF GOVERNMENT CLASSIFIED.

I. Monarchy.
  1. As to power.
    a. Absolute.
    b. Limited.
  2. As to tenure of office.
    a. Hereditary.
    b. Elective.

II. Aristocracy.—*Oligarchy.*

III. Democracy.
  1. Pure.
  2. Representative.—*Republic.*
    a. As to distribution of power.
      1. Centralized.
      2. Dual.
    b. As to the relation of Legislative to Executive.
      1. Presidential.
      2. Parliamentary.

> We cannot honor our country with too deep a reverence; we cannot love her with an affection too pure and fervent; we cannot serve her with an energy of purpose or a faithfulness of zeal too steadfast and ardent.—*Grimke.*

WRITTEN EXERCISE.

1. Imagine a colony taking possession of an uninhabited island in the Pacific Ocean. State the conditions and institutions necessary to establish one of the types of government.
2. Give the form of government in each of these states: Plymouth Colony; Virginia Colony; Ancient Athens; Sparta; Venice in the Middle Ages; China; Switzerland; Ancient Judea; Rome 509-30 B. C.; Germany.
3. Explain Lincoln's words, "Government of the people, for the people, and by the people."
4. Discuss the relative merits of the different types of government for different conditions of society.

V. Law.

Law is a rule of civil conduct prescribed by the supreme power in a state, commanding what is right, and prohibiting what is wrong.—Blackstone.

SOURCES OF AMERICAN LAW.

I. English Common Law.
  1. Written (*Lex Scripta*).
    a. Parliamentary Enactments—Statutes.

2. Unwritten Law (*Lex non Scripta*).
    a. Records of Courts.
    b. Treatises on Law.
    c. Custom.
        1. General.
        2. Particular.

II. Colonial development, 1607-1776.

III. Later constitutions and legislative enactments.

ORDER OF PRECEDENCE OF LAWS IN THE UNITED STATES.

1. U. S. Constitution.
2. U. S. Statutes and Treaties.
3. State Constitutions.
4. State Statutes.
5. English Common Law.

QUESTIONS.

1. There are two modes of making a government better: evolution and revolution. Explain and illustrate each. 2. What advantages has a written constitution over an unwritten? An unwritten over a written? 3. Where would you look to find the constitution of England? 4. What is the meaning of the Magna Charta? Petition of Right? Act of Settlement? Bill of Rights (1688)? Habeas Corpus Act (1679)? Are these a part of the constitution of England? What else? 5. Is any part of our constitution unwritten? Illustrate. 6. "Every state has a constitution considered as an objective fact, or a constitution of the people; but every state has not a constitution considered as an instrument of evidence, or a constitution of the government." Explain. 7. Illustrate the meaning of precedence of laws. 8. Most states of the United States have adopted by statute all English law not repugnant to their institutions, enacted to the year 1607. Why? 9. What is the civil law of Rome? Ecclesiastical law of England? 10. What is the basis of French law? Louisiana state law? 11. What is the meaning of the sentence, "Parliament is omnipotent"? 12. "Law is a rule of action." Explain. 13. Does law deal with questions of conscience? 14. Would government be necessary if man were morally perfect? 15. What is equity? Illustrate.

A CONSTITUTION DEFINES:

I. The Political State.

II. The Government.
    a. Structure, powers, and duties.
    b. Restrictions and prohibitions.
    c. Action.
        1. Elections.
        2. Legislation.

III. Amending powers.

> The fundamental law of rights is, be a person, and respect others as persons.—*Mulford.*

VI. Rights.

A right is a just claim. Liberty is the freedom of exercise to enjoy our rights, and is called political, civil, or religious according to the particular class of rights to which it refers.

CLASSIFICATION OF RIGHTS.

I. Political.
    1. To establish a form of government.
    2. To exercise the right to vote—suffrage.

II. Civil.
    1. Absolute.
        a. Personal security.
            1. Life. 2. Liberty. 3. Reputation.
        b. Personal liberty.
        c. Private property.
    2. Relative.
        a. Public.
            1. Protection of people by the government.
            2. Obedience of the people to the government.
        b. Private.
            1. Relation of husband and wife.
            2. Relation of parent and child.
            3. Relation of master and servant.
                Relation of employer and employed.
            4. Relation of guardian and ward.

QUESTIONS.

1. What is a property right? 2. May two persons have a property right in the same thing? 3. What is communism? Socialism? 4. Is our present public school system socialistic? 5. State the principles of society advocated in Bellamy's *Looking Backward.* 6. What was "The Brook Farm Community"? 7. Could the state, by law, abolish the right in private property? 8. What is the distinction between wealth and a property right? 9. How may one forfeit his political rights? Civil rights? 10. Does a convict forfeit his property rights? 11. What are natural or inalienable rights? Illustrate. 12. Classify the following rights according to the outline: (a) Freedom of speech. (b) Free locomotion. (c) Right to sue and be sued. (d) Freedom of the press. (e) Right of petition. (f) Right to dispose of one's property by will. 13. Can a person enjoy civil rights without political rights? 14. Who are citizens of the United States? Of Canada? 15. What is slander? Libel? 16. Why may a state inflict capital punishment? 17. What argument can you give against common ownership of property? 18. What is the source of political rights? 19. What is the right of eminent domain? Give example. 20. Are the two kinds of rights, political and civil, inseparable?

FOUR GROUPS OF RIGHTS.

1. Political.
2. Industrial.
3. Social.
4. Moral and religious.

WRITTEN EXERCISE.

1. Write a paper on "The Rights Which I Enjoy."

SUGGESTIONS.

1. The teacher should call attention to the salient features of government of other leading nations through this course. Informal talks on the government of England, France, Germany, Mexico, etc., will add interest and cause the student to go deeper into the reasons of things. For this study in comparative politics, *The Statesmen's Year Book,* published by MacMillan & Co., New York, will give all necessary data.
2. During this course the student should read as many as possible of the following documents:

   The Magna Charta, 1215; The Bill of Rights, 1688; the charters of Virginia, Maryland, Connecticut, or Massachusetts: The Mayflower

Compact, 1620; The Articles of the New England Confederation, 1643; Penn's Plan of Union, 1697; Franklin's Plan of Union, 1754; Declaration of Rights, 1765, 1775; The Mecklenburg Resolutions, 1775; The Declaration of Independence, 1776; The Articles of Confederation, 1777; A Treaty with Great Britain (1846); Ordinance of 1787; Washington's Farewell Address, 1796; Kentucky Resolutions, 1798; Hartford Convention Resolutions, 1815; An Act of Secession; Emancipation Proclamation, 1863; The Swiss Constitution, 1874; Act admitting some state to the Union; A Supreme Court Decision in full; A State Constitution; A City Charter.

The teacher cannot place too much emphasis upon reading history and government from original sources.

Patriotism in Literature.

For forms of government let fools contest,
Whate'er is best administered is best.

—*Pope.*

It is better for a city to be governed by a good man than by good laws.—*Aristotle.*

We are more heavily taxed by our idleness, pride, and folly than we are taxed by government.—*Franklin.*

I offer here no olive branch;
I ask not who was right or wrong;
I care not, so the land we call
Our own is free and strong.

—*S. K. Phillips.*

(Wellington) His work is done;
But while the races of mankind endure
Let his great example stand
Colossal, seen in every land,
And keep the soldier firm, the statesman pure,
Till in all lands and thro' all human story
The path of duty be the way to glory.

—*Tennyson.*

Land of the forest and the rock,
Of dark blue lake and mighty river,
Of mountains reared aloft to mock
The storm's career, the lightning's shock;
My own green land forever!
O, never may a son of thine,
Where'er his wandering steps incline,
Forget the skies which bent above
His childhood like a dream of love.

—*Whittier.*

We know what masters laid thy keel,
What workmen wrought thy ribs of steel;
Who made each mast, and sail and rope,
What anvils rang, what hammers beat:
In what a forge, and what a heat
Were shaped the anchors of thy hope.
Fear not each sudden sound or shock,
'Tis but the flapping of a sail,
And not a rent made by the gale.
In spite of rock and tempest roar,
In spite of false lights on the shore,
Sail on, nor fear to breast the storm.
Our hearts, our hopes, are all with thee;
Our hearts, our hopes, our prayers, our tears,
Our faith triumphant o'er our fears
Are all with thee, are all with thee.

—*Longfellow.*

Algebra.

ALGEBRA is the department of mathematics which employs certain symbols and thereby shortens and simplifies the solution of arithmetical problems. Sir Isaac Newton termed this branch of study universal arithmetic.

It is thought that Diophantes of Egypt originated this science in the 4th century B. C., when Alexandria was renowned as a center of learning. The oldest manuscript in which algebra is treated is that of Ahmes, who, in 1700 B. C., copied a treatise which was written about 2500 B. C. Little was known of algebra in Europe until the 9th century A. D., when it was introduced in the greater part of the continent through the efforts of Mohammed Ben Musa.

Algebra is now a part of the curriculum of all accredited schools. In many school systems it is a supplementary branch and is taught in connection with arithmetic in the grammar grades. Eminent scholars frequently apply algebraic methods to problems in logic, psychology and other sciences.

The Unknown Quantity.

The unknown is the nucleus of attraction. It is the center of mental gravitation. It was a desire to discover the unknown that led Columbus to brave the dangers of the untried and dreaded waves of the stormy Atlantic. The same desire has led other discoverers to discover; it has caused the inventor to invent. The great and glorious reformations of the world were wrought through the mental activities in seeking to know and inquiring into the new and unknown.

The charm of the study of algebra is due to the hold this subject has upon the mind in seeking for the unknown quantity. The logical reasoning, step by step, and the approach to the final conclusion, which reveals the value of the unknown quantity, hold the mental faculties close and firm in fascinating relevancy.

The value of the study of algebra as a mental invigorator cannot be overestimated. It strengthens the reasoning powers, stimulates the observation, develops precision and fosters accuracy.

The first lessons in algebra should be an introduction to the simplest method of discovering the value of the unknown quantity. Consequently, a long list of elementary problems involving one unknown quantity should be presented to a beginner. A few sample problems will be given in this brief work.

PROBLEM: John and William together picked 120 boxes of berries. William picked 20 boxes more than John. How many boxes did each pick?

Represent the unknown quantity by X. The beginner will at once tell you that there are two unknown quantities. That is true, but when either becomes known the other is no longer unknown. Allow the pupil the privilege of judging

which of the unknown quantities shall be represented by X. Two solutions no doubt will be deduced.

Solution I. Let X=number of boxes picked by John.
Then X+20=number of boxes picked by William.
X+X+20=120. Number of boxes picked by both.
2 X+20=120
2 X=120—20
2 X=100
X= 50. Number of boxes picked by John.
X+20= 70. Number of boxes picked by William.

Solution II. Let X=number of boxes picked by William.
Then X—20=number of boxes picked by John.
Adding X+X—20=120
2X—20=120
2 X=120+20
2 X=140
X= 70. Number of boxes picked by William.
X—20= 50. Number of boxes picked by John.

Other solutions of the same problem may be suggested by the pupil. This tendency on the part of the pupil should be encouraged. See who can give another solution to the same problem.

Solution III. Let X=number of boxes picked by John.
Then 120—X=number of boxes picked by William.
120—X—X=20
120—20=X+X
100=2 X
2 X=100
X= 50. Number of boxes picked by John.

Allowing more than one solution to the same problem adds to the attractiveness, begets originality and inculcates independence of thought.

Problem II: The sum of two numbers is 60. The greater exceeds the less by 12. What are the numbers?

Again permit the learner to decide what quantity should be represented by X.

Solution I. Let X=the less number.
Then X+12=the greater number.
Adding X+X+12=60
2 X+12=60
2 X=60—12
2 X=48
X=24. The less number.

Solution II. Let X=the greater number.
X—12=the less number.
Adding X+X—12=60
2 X—12=60
2 X=60+12
2 X=72
X=36. The greater number.

Solution III. Let X=the less number.
60—X=the greater number.
60—X—X=12
60—12=X+X
48=2 X
Reversing 2 X=48
X=24. The less number.

Scores of such problems with similar solutions should precede the fundamental operations of algebra. It will lead the growing mind to love to seek for the value of the unknown.

THE COEFFICIENT. The term *coefficient* is new to those taking the initial step in algebra. It means a number or letter placed before a mathematical quantity to show how often it is to be taken. In the expression 5 X, 5 is the coefficient and signifies that the quantity X is to be taken 5 times. In $3(x+y)$, 3 is the coefficient and indicates that the sum of x and y is to be taken 3 times.

In $x(y+2)$, x is the coefficient and shows that the sum of y and 2 is to be taken as many times as there are units in x. In $(c+d)z$, $c+d$ is the coefficient of z, and implies that z is to be taken as many times as there are units in the sum of c and d.

EXPONENTS. They have the same significance in algebra as in arithmetic. In the expression 9^2, the small 2 placed at the right of the upper part of 9 is the exponent and means that 9 should be taken twice as a factor. $9^2=9\times9=81$. x^2 is read x square or x raised to second power, and means that x is to be used twice as a factor. x^3 is read x cube or x raised to the third power and means that x is to be used three times as a factor.

The exponent shows that the quantity affected by the exponent is to be taken as a factor as many times as there are units in the exponent.

x^4 means that x is to be taken four times as a factor, that is, x is multiplied by x, then by x and again by x. When no exponent is expressed it means that the exponent is 1. x means x^1.

Signs of Aggregation.

The *parenthesis* ( ), the *brace* { }, the *bracket* [ ] and the *vinculum* ——— are all signs of aggregation. They all have the same meaning. The purpose of these signs is to show that the expression included within them is to be treated as one quantity.

$50-(7+4)=39$. We treat $(7+4)$ as a single number, viz. 11, the sum of 7 and 4. $50-(7-4)=47$. Here again the expression within the bracket, $[7-4]$, is treated as a single number, viz. 3, the difference of 7 and 4. Removing the signs of aggregation, the first expression becomes $50-7-4=39$, and removing the sign of aggregation the second expression becomes $50-7+4=47$. Hence we deduce the following rule for removing signs of aggregation:

RULE. In removing a sign of aggregation preceded by the sign minus, change all the signs included within the sign of aggregation. That is, the plus signs become minus and the minus signs become plus.

When the sign of aggregation is preceded by the sign plus, no signs are changed. Simply erase the sign of aggregation. Signs of aggregation are often enclosed within each other. In such cases they may be removed in succession by the rule given above. For beginners it is advisable to remove the innermost pair first. Simplify the following by removing signs of aggregation:

$7x-(2x+\{-3x-\overline{x-2y}\})$. Removing the vinculum first as it is innermost, we have $7x-(2x+\{-3x-x+2y\})$. There being a + before the brace, no signs are changed. Removing the parenthesis, the expression becomes $7x-2x+3x+x-2y$. All signs within the parenthesis are changed because the parenthesis is preceded by the sign —. Collecting, the expression becomes $9x-2y$. Answer.

Simplify $6a+(a-b)-(-4b+2a)=6a+a-b+4b-2a=5a+3b$. Answer.

Simplify
$$25-(4-[3-\overline{15+6}])=$$
$$25-(4-[3-15-6])=$$
$$25-(4-3+15+6)=$$
$$25-4+3-15-6=3$$

THE NUMERICAL VALUE. The numerical value of an algebraic expression is found by stating the value each letter has and then performing the operation indicated. Supposing a=3, b=5, c=6; find the numerical value of the following:

$3a-b+2c$: $3a-b+2c=9-5+12=16$

$3a-(b+2c)$: Removing the parenthesis, $3a-b-2c=9-5-12=-8$.

$10a-b^2+c^2$: $10a-b^2+c^2=30-25+36=41$.

$\frac{ab^2}{c}$: $\frac{ab^2}{c}=\frac{3\times 25}{6}=\frac{75}{6}=12\frac{1}{2}$.

a^2-b: $a^2-b=9-5=4$.

$\frac{b^3}{c}$: $\frac{b^3}{c}=\frac{125}{6}=20\frac{5}{6}$.

Supposing x=7, y=8, z=10; find the numerical value of the following:

$2(x+2y)$: $2(x+2y)=2(7+16)=2\times 23=46$.

$4x-2(2z-x)$: $4x-2(2z-x)=28-2(20-7)=28-2\times 13=28-26=2$.

$\frac{x}{2}-\frac{y}{4}$: $\frac{x}{2}-\frac{y}{4}=\frac{7}{2}-\frac{8}{4}=3\frac{1}{2}-2=1\frac{1}{2}$.

$\frac{z^2}{y^2}$: $\frac{z^2}{y^2}=\frac{10^2}{8^2}=\frac{100}{64}=1\frac{36}{64}=1\frac{9}{16}$.

Supposing d=1, c=12 and e=2; find the numerical value of the following:

$\frac{2c-d}{2}$: $\frac{2c-d}{2}=\frac{2\times 12-1}{2}=\frac{23}{2}=11\frac{1}{2}$.

e^2-d^2: $e^2-d^2=2^2-1^2=4-1=3$.

$\frac{c}{e^2}$: $\frac{c}{e^2}=\frac{12}{4}=3$.

$c^2-8(e^2-1)$: $c^2-8(e^2-1)=144-8(2^2-1)=144-8(4-1)=144-(32-8)=144-32+8=152-32=120$.

THE DOUBLE MEANING OF + AND —. Operations in algebra are indicated by the same signs as those used in arithmetic and need no discussion here. The sign + has two meanings as has the sign —. The sign + is used as in arithmetic to denote the operation of addition. It also marks that a quantity has a value above zero. For example, +10 means 10 more than zero. The sign — as in arithmetic indicates subtraction. It also marks that a quantity has a value below zero. For example, —10 means 10 less than zero.

Negative and Positive Quantities.

A *negative* quantity, that is, a quantity preceded by the sign —, is new to the beginner of algebra and should have a full explanation before he is introduced to the subject of algebraic addition.

A negative quantity means less than 0, or less than nothing. The inquiring mind may ask, "Can a thing be less than nothing?" The explanation most tangible to the mind of a youth is, "Can not a person be in debt without having property or money, or can not a man's liabilities exceed the value of his property, money and credit?" The asking of such questions on the part of the student indicates mental growth and should be encouraged. When the learner is able to ask an intelligent question about any subject his mind is in a receptive state and explanations are then productive of understanding.

Positive quantities are those preceded by the sign plus (+) or by no sign at all, the sign + being omitted before the first quantity of a series, as 4x+3y.

The Positive Sign.

Paul, when a boy, would often
Wish for a pony ride;
He pondered o'er the notion
And thus he did decide:

"I'll work and save my earnings,
If e'er so small they be;
I'll satisfy my yearnings
By strict economy."

Soon he saved up dollars ten
To buy a pony fine;
Ten dollars we will mark, then,
By the pos-i-tive sign (+).

The Minus Sign.

Edward was a neighbor boy
Who evil folly learned;
To him things useless were a joy,
He spent more than he earned.

He borrowed coin where'er he could,
He little worked, but played;
His friends left him (we thought they would),
Thus he was much dismayed.

His debt soon was dollars ten
And made him squirm and whine;
This debt, my lad, now as then,
We'll give the minus sign (—).

Addition.

Algebraic addition is the process of combining. When the quantities are all either positive or negative, there is no difference between addition in arithmetic and in algebra. e. g. 5x+6x=11x. —5x+—6x=—11x. Both of the above operations should be illustrated by the use of problems, conceiving the negative quantities to represent debt and the positive quantities to represent money.

Problem I. One week John earned $5x and the next week he earned $6x. In both weeks he earned how many dollars?

Solution: $5x+$6x=$11x.

Problem II. Mr. Jones contracted a debt of $5x on Monday. On Tuesday he contracted a debt of $6x. He then had how large a debt?

Solution: —$5x+—$6x=—$11x.

The two additions may be indicated as follows:

Add	$5x	Add	—$5x
	$6x		—$6x
	$11x.		—$11x.

The next step in addition should consist of combining positive and negative quantities. Suppose a boy earns $5x in a week but has a debt of $2x; what are his finances at the close of the week?

Adding or combining, $5x+—$2x=$3x.

Suppose a boy earned $2x in a week but has a debt of $5x; what are his finances at the close of the week?

Adding or combining $2x+—$5x=—$3x.

These additions may be indicated as follows:

Add	$5x	Add	$2x
	—$2x		—$5x
	$3x.		—$3x.

In the first case the boy has $3 in money. In the second case the boy would have a debt of $3.

Unlike quantities or quantities represented by different letters such as x and y can be added or combined only by use of sign. Thus the sum of x and y is x+y. The sum of x and —y is x—y.

	$3x+2y$		$6a+5b$		$4x-3y+5z^2-4$
	$4x-8y$		$-8a+b$		$-2x-y+2z^2+3$
Sum	$7x-6y$		$3a-10b$		$-x-2y+z^2-2$
		Sum	$a-4b$	Sum	$x-6y+8z^2-3$

Algebraic Subtraction.

Subtraction is the process of finding how much must be added to the subtrahend to make it equal the minuend. This method of teaching subtraction will apply to arithmetic as well as to algebra. A child learns that $8-5=3$. At the same time he should learn that 3 must be added to 5 to make 8. This thought is the underlying principle of algebraic subtraction.

PROBLEM.

$4a-9b+c$	Minuend.
$-a+2b-3c$	Subtrahend.
$5a-11b+4c$	

Steps in the explanation of the solution:

Keeping in mind that the negative quantity $-a$ represents debt, ask what must be added to $-a$ to make $+4a$. Answer $5a$. To make it more easily understood, ask what must be added to a debt of one dollar to make 4 dollars. Answer 5 dollars. What must be added to $2b$ to make $-9b$? Answer $-11b$. What must be added to \$2 to make a debt of \$9? Answer: A debt of \$11 represented in algebra by -11.

Again conceiving the negative quantity as debt, ask what must be added to $-3c$ to make c. Answer $4c$. What must be added to a debt of \$3 to make it \$1? Answer \$4. Many similar problems should be given every beginning class in algebra. From this process we deduce the general rule for subtraction:

RULE. To subtract one quantity from another, change the signs of the subtrahend and proceed as in addition.

Allow a student to actually change the signs of the subtrahend but a few times. The more apt learner need not stop to change signs but only imagine the signs of the subtrahend changed and all should do so before considering the subject of subtraction mastered.

PROBLEMS.

$7x+4z^2-5$	Minuend.	$-8a-4c+8cd$	Minuend
$-2x-z^2-2$	Subtrahend.	$-3a+4c+2cd$	Subtrahend
$9x+5z^2-3$		$-5a-8c+6cd$	
$4xy-z+xz$	Minuend	$14a^2+6b^2-3c$	Minuend
$2xy-z-2xz$	Subtrahend	$-10a^2+4b^2-4c$	Subtrahend
$2xy-0+3xz$		$24a^2+2b^2+c$	

A *monomial* is an algebraic expression unconnected with any other by the sign of addition, subtraction, equality or inequality. It may be said to consist of but one term, as a, b^2, $4xy$, $3x^2y$.

A *binomial* is an algebraic expression of two terms connected by the sign $+$ or $-$, as $a+b$, $2x-3y$, $4xy^2-3z^2$.

A *trinomial* is an algebraic expression consisting of three terms connected by the sign $+$ or $-$, as $3a-b+c$, $x+y+2z$.

A *polynomial* is an algebraic expression consisting of two or more terms connected by the sign $+$ or $-$, as $a+b-d+2$, $b+c$, $x-y+3z$, $5x^2y^4-9x^3y^3+x^2y^2z-xz-z^2$

Multiplication in Algebra.

Multiplication in algebra does not differ from multiplication in arithmetic when quantities are represented by numerals, and the signs of the multiplicand and multiplier are like signs.

The laws governing the signs and exponents should be carefully studied by a beginner of algebra.

We know by arithmetic that $4\times3=12$, that $4\times4=4^2=16$. Then x multiplied by $x=x^2$, y times $y=y^2$, xy times $xy=x^2y^2$.

By arithmetic the student knows that $5\times5\times5=5^3=125$; that $3\times3\times3=3^3=27$. Applying the same law we have $a\times a\times a=a^3$, $ab\times ab\times ab=a^3b^3$; $z\times z\times z=z^3$.

We know that 4 is the square of 2 or 2^2; $4\times4=16$; $2^2\times2^2=2^4=2\times2\times2\times2=16$. 16 is the fourth power of 2; thus $2^4=16$. Therefore $a^2\times a^2=a^4$.

8 is the cube of 2. $8\times2=16$, or $2^3\times2=16=2^4$. Applying the same law $a^3\times a=a^4$.

16 is the fourth power of 2; written $2^4=16$, 2 is the first power of 2; $16\times2=32$ or $2^4\times2=2^5=32$. 32 is the fifth power of 2. Applying the same law to literal quantities we have $a^4\times a=a^5$. Hence the law:

The exponent of a literal quantity in the product is equal to the exponent of the same quantity in the multiplicand plus the exponent of the same quantity in the multiplier.

In other words, when multiplying like quantities, add the exponent of multiplier to exponent of multiplicand. Thus: a times $a=a^2$; x^2 multiplied by $x^4=x^6$; $b^2\times b\times b^5=b^8$, $cd^2\times c^3d\times c^2d^4=c^6d^7$.

In arithmetic we are taught that multiplication is a short process of division. In algebra it seems to be a short method of either addition or subtraction. 10 multiplied by 3=30; that is, we have added 10 three times to 0. 10 multiplied by $-3=-30$. Here we have subtracted 10 three times from 0. -10 multiplied by $3=-30$. Here we have added -10 three times to 0. Add a ten dollar debt three times to nothing and we have a thirty dollar debt. As stated before, debt is represented by a negative quantity. -10 multiplied by $-3=+30$ or 30. Here we have subtracted -10 three times from 0 and get $+30$.

When we subtract debts we pay them. When we have paid three ten-dollar debts we are 30 dollars better off than we were before we paid them or before we subtracted the debts. Hence the law governing the signs in multiplication of algebra are as follows:

A quantity preceded by the sign + multiplied by a quantity preceded by the sign + produces a positive quantity, that is one preceded by +. A quantity preceded by the sign — multiplied by a quantity preceded by the sign — produces a positive quantity. A quantity preceded by the sign — multiplied by a quantity preceded by the sign + produces a negative quantity or a quantity preceded by the sign —. A quantity preceded by the sign + multiplied by a quantity preceded by the sign — produces a negative quantity.

This law tersely stated is as follows:

In multiplication, like signs produce + and unlike signs produce —. Solving the following, we have:

$7x^2$ multiplied by $2x^6=14x^8$ $\qquad$ $5b^3$ multiplied by $-3ab=-15ab^4$

$-8a^2$ multiplied by $-3a^3=+24a^5$. $\qquad$ $-4xy$ multiplied by $7x^2yz=-28x^3y^2z$

Problems.

$6a-4$	Multiplicand	$9x^2-4z^2$	Multiplicand
$3a$	Multiplier	$-2x$	Multiplier
$18a^2-12a$	Product.	$-18x^3+8xz^2$	Product.

$a - b$ Multiplicand
$a - b$ Multiplier
$a^2 - ab$
$\quad - ab + b^2$
$a - 2ab + b^2$ Product.

$a + b$ Multiplicand
$a + b$ Multiplier
$a^2 + ab$
$\quad + ab + b^2$
$a^2 + 2ab + b^2$ Product.

$2x + 5$ Multiplicand
$6x - 1$ Multiplier
$12x^2 + 30x$
$\quad - 2x - 5$
$12x^2 + 28x - 5$ Product.

$x^2 - xy + y^2$ Multiplicand
$x + y$ Multiplier
$x^3 - x^2y + xy^2$
$\quad + x^2y - xy^2 + y^3$
$x^3 + y^3$ Product.

Division.

Division in algebra is the process of finding one of two factors that produce a quantity, when one factor and the product are given.

The product of the two factors is the dividend. The divisor is the given factor, and the quotient is the required factor.

Division is the converse of multiplication; the dividend being the product; the divisor being one of the two factors of the dividend. Consequently the laws governing the exponents and signs can be deduced from the knowledge obtained in studying multiplication.

If we add the exponent of the multiplier to the exponent of the multiplicand to find the exponent of the product, we must subtract the exponent of the divisor from the exponent of the dividend to find the exponent of the quotient.

$a^2 \times a = a^3$
Then $a^3 \div a = a^2$ or $a^3 \div a^2 = a$.
$a^2 \div a^2 = a^0$
$a^2 \div a^2 = 1$, just as $4 \div 4 = 1$.
Therefore $a^0 = 1$.

Any quantity with an exponent 0 is equal to unity. The law governing the signs in division are the same as in multiplication; that is, like signs produce + and unlike signs produce —. The law may be more definitely stated by saying, make the sign of the quotient + when the divisor and the dividend have like signs. Make the sign of the quotient — when the divisor and dividend have unlike signs.

Applying laws for exponents and signs we thus solve the following:

$-63 \div 7 = -9$
$-63 \div -7 = 9 = +9$

$63 \div -7 = -9$
$+63 \div +7 = 9 = +9$

$72a^4 \div 8a = 9a^3$
$-72a^3 \div 6a^2 = -12a$

$-72a^2 \div -3a = 24a$
$72a^5 \div -12a^2 = -6a^3$

To divide a polynomial by a monomial:

$3a)9a^2 - 6a$
$3a - 2$ Quotient.

$-3a)9a^2 - 6a$
$-3a + 2$ Quotient

$-4x^2y)8x^4y^2 - 12x^3y^2 - 16x^2y$
$-2x^2y + 3xy + 4$ Quotient.

To divide one polynomial by another:

$a^2 + 2ab + b^2)a + b$ Divisor
$a^2 + ab$ $\quad a + b$ Quotient
$ab + b^2$
$ab + b^2$

Explanation: a, the first term of the divisor is contained in a^2 the first term of the dividend $+a$ times. This becomes the first term of the quotient. Multiplying the divisor, $a+b$, by a, the first term of the quotient, we obtain the quantity a^2+ab. We subtract this from the dividend and have for a remainder $ab+b^2$. This may be called the new dividend: a, the first term of the divisor, is contained in ab, the first term of the new dividend, $+b$ times. Then $+b$ becomes the second term of the quotient. Multiplying the divisor $a+b$ by $+b$, we obtain the quantity $ab+b^2$. Subtracting this quantity from the new dividend we have no remainder.

By applying the same steps we solve the following problems:

Dividend $a^2-2ab+b^2$) $a-b$ Divisor
a^2-ab $a-b$ Quotient
$-ab+b^2$
$-ab+b^2$

Dividend a^3-b^3) $a-b$ Divisor
a^3-a^2b a^2+ab+b^2 Quotient
a^2b-b^3
a^2b-ab^2
ab^2-b^3
ab^2-b^3

Dividend $6x^2-23xy+20y^2$) $3x-4y$ Divisor
$6x^2-8xy$ $2x-5y$ Quotient
$-15xy+20y^2$
$-15xy+20y^2$

Dividend $6a^2+29a+35$) $3a+7$ Divisor
$6a^2+14a$ $2a+5$ Quotient
$15a+35$
$15a+35$

Dividend $10a^3+33a^2-52a+9$) $5a-1$ Divisor
$10a^3-2a^2$ $2a^2+7a-9$ Quotient
$35a^2-52a+9$
$35a^2-7a$
$-45a+9$
$-45a+9$

Equations Containing Two or More Unknown Quantities.

$x+4=19$. By subtracting 4 from each side of this equation, we have $3x=19-4$, or $3x=15$, $x=5$. In the equation $3x+y=19$, we can not find the value of x because we do not know the value of y.

However, if we have two equations containing x and y and x has the same value in each equation, and y has the same value in each equation, we can combine these two equations in such a manner as to cause one of the unknown quantities to disappear. This process is called elimination, and such equations are said to be simultaneous.

Definition: *Simultaneous equations* are those in which the same unknown quantity has the same value in each equation.

Elimination is any process of deducing from two or more simultaneous equations, a single equation containing but one of the unknown quantities.

There are four methods of elimination which most books on algebra call three, viz., addition, subtraction, comparison and substitution. Addition and subtraction are treated as one method by most authors. We will first treat of elimination by addition and subtraction.

Addition. No problem can be solved by addition unless one of the unknown quantities has unlike signs.

Solve $\begin{cases} x+y=11 & (1) \\ x-y=3 & (2) \end{cases}$

By adding the two equations we have

$$2x=14. \qquad (3)$$
$$x=7. \qquad (4)$$

The unknown quantity y disappears because the sum of $+y$ and $-y$ is 0. Knowing the value of x is 7, we write equation one (1) by putting 7 in place of its equal, which is x, and the equation becomes

$$7+y=11.$$
$$y=11-7.$$
$$y=4.$$

Solution of the same problem by *Subtraction.*

Solve $\begin{cases} x+y=11. & (1) \\ x-y=3. & (2) \end{cases}$

By subtracting equation (2) from equation (1) we have

$$2y=8. \qquad (3)$$
$$y=4. \qquad (4)$$

Knowing the value of y is 4, we write equation (1) putting 4 in place of its equal y and the equation becomes

$$x+4=11.$$
$$x=11-4.$$
$$x=7.$$

Elimination by Comparison. In order to understand this method we must see that the student knows the meaning of the axiom: Things equal to the same thing are equal to each other. Illustration: $2\times6=12$. $3\times4=12$. Then $2\times6=3\times4$. If we know two values of x, then we know that these two values are equal to each other.

Solve by comparison	$\begin{cases} x+y=11. \\ x-y=3. \end{cases}$	(1) (2)
By transposing y in (1)	$x=11-y.$	(3)
By transposing y in (2)	$x=3+y.$	(4)
By axiom	$3+y=11-y.$	(5)
Transposing	$y+y=11-3.$	(6)
Collecting	$2y=8.$	(7)
	$y=4.$	(8)
Substituting y in (1)	$x+4=11.$	(9)
Transposing	$x=11-4.$	(10)
	$x=7.$	(11)

Elimination by Substitution.

Solve by substitution	$\begin{cases} x+y=11. \\ x-y=3. \end{cases}$	(1) (2)
Transposing y in (2)	$x=3+y.$	(3)
Substituting x in (1)	$3+y+y=11.$	(4)
Transposing	$y+y=11-3.$	(5)
Collecting	$2y=8.$	(6)
	$y=4.$	(7)
Substituting y in (1)	$x+4=11.$	(8)
Transposing	$x=11-4.$	(9)
	$x=7.$	(10)

Solve by addition or subtraction
$$\begin{cases} 3x+2y=26. & (1) \\ x+3y=18. & (2) \end{cases}$$
Multiplying (2) by 3 $\quad 3x+9y=54. \quad (3)$
Subtracting (1) from (3) $\quad 7y=28. \quad (4)$
$\quad y=4. \quad (5)$

Substituting y in (2) $\quad x+12=18. \quad (6)$
$\quad x=18-12. \quad (7)$
$\quad x=6. \quad (8)$

Why can not this problem be solved by addition? Answer—Because all the signs are like signs. It can be solved by comparison or substitution.

Find the value of x and y.
$$\begin{cases} 2x+4y=28. & (1) \\ 3x-2y=26. & (2) \end{cases}$$
Multiplying (2) by 2 $\quad 6x-4y=52. \quad (3)$
Adding (1) and (3) $\quad 8x=80. \quad (4)$
$\quad x=10.$
Substituting x in (1) $\quad 20+4y=28. \quad (5)$
$\quad 4y=8. \quad (6)$
$\quad y=2.$

Can the problem be solved by subtraction? Yes, by multiplying (1) by 3 and (2) by 2. The same problem may be solved by addition by first dividing (1) by 2 and then proceeding as above.

Solve the following by addition or subtraction:

$$\left.\begin{matrix} 3x+y=10. \\ 2x-y=5. \end{matrix}\right\}$$ Ans. $x=3. \quad y=1.$

$$\left.\begin{matrix} 9x+2z=63. \\ 4x-z=11. \end{matrix}\right\}$$ Ans. $x=5. \quad z=9.$

$$\left.\begin{matrix} 2x+y=12. \\ 4x+3y=27. \end{matrix}\right\}$$ Ans. $x=4\frac{1}{2}. \quad y=3.$

$$\left.\begin{matrix} y-2z=1. \\ 4y-z=39. \end{matrix}\right\}$$ Ans. $y=11. \quad z=5.$

Solve by comparison
$$\begin{cases} 3x+2y=30. \\ x+y=11. \end{cases}$$

$3x+2y=30. \quad (1)$
$x+y=11. \quad (2)$
Transposing (1) $\quad 3x=30-2y. \quad (3)$
Then, $\quad x=\frac{30-2y}{3}. \quad (4)$
Transposing in (2) $\quad x=11-y. \quad (5)$
Then, $\quad \frac{30-2y}{3}=11-y. \quad (6)$
Clearing of fractions $\quad 30-2y=33-3y. \quad (7)$
Transposing $\quad 3y-2y=33-30. \quad (8)$
$\quad y=3. \quad (9)$
Substituting y in (2) $\quad x+3=11. \quad (10)$
$\quad x=8. \quad (11)$

Solve the following by comparison:

$$\left.\begin{matrix} 4x+3w=29. \\ 2x-w=2. \end{matrix}\right\}$$ Ans. $x=3\frac{1}{2}. \quad w=5.$

$$\left.\begin{matrix} 4v-2t=32. \\ 3v+3t=60. \end{matrix}\right\}$$ Ans. $v=12. \quad t=8.$

Solve by substitution	$\begin{cases} x+3y=22. \\ 3x-y=6. \end{cases}$	(1) (2)
Transposing (1)	$x=22-3y.$	(3)
Multiplying by 3,	$3x=66-9y.$	(4)
Substituting 3x in (2)	$66-9y-y=6.$	(5)
Transposing,	$-9y-y=6-66.$	(6)
Collecting,	$-10y=-60.$	(7)
or	$10y=60.$	(8)
	$y=6.$	(9)
Substituting y in (2)	$3x-6=6.$	(10)
	$3x=6+6.$	(11)
	$3x=12.$	(12)
	$x=4.$	(13)

Solve the following by substitution:

$\left.\begin{matrix} 2x-y=16. \\ 5x+2y=67. \end{matrix}\right\}$ Ans. $x=11.$ $y=6.$

$\left.\begin{matrix} 5v+2w=31. \\ 2v+3w=30. \end{matrix}\right\}$ Ans. $v=3.$ $w=8.$

$\left.\begin{matrix} 4y-z=1. \\ 10y+2z=25. \end{matrix}\right\}$ Ans. $y=1\frac{1}{2}.$ $z=5.$

Solution of simultaneous equations containing three unknown quantities.

Solve	$\begin{cases} 4x-y+2z=27. \\ x+2y-z=3. \\ 2x+3y+4z=61. \end{cases}$	(1) (2) (3)
Multiplying (2) by 4	$4x+8y-4z=12.$	(4)
Subtracting (4) from (1)	$-9y+6z=15.$	(5)
Multiplying (2) by 2	$2x+4y-2z=6.$	(6)
Subtracting (3) from (6)	$y-6z=-55.$	(7)
Adding (7) and (5)	$-8y=-40.$	(8)
	$y=5.$	(9)
Substituting y in (7)	$5-6z=-55.$	(10)
Transposing	$-6z=-55-5.$	(11)
Collecting	$-6z=-60.$	(12)
	$z=10.$	(13)
Substituting y and z in (2)	$x+10-10=3.$	(14)
	$x=3.$	(15)

Solve by any process.

$\left.\begin{matrix} 2v+2t-2w=6. \\ v-t+3w=23. \\ 4v+t-w=21. \end{matrix}\right\}$ Ans. $v=6.$ $t=4.$ $w=7.$

$\left.\begin{matrix} 3x+y-3z=26. \\ 4x-2y-4z=18. \\ x+2y+5z=29. \end{matrix}\right\}$ Ans. $x=9.$ $y=5.$ $z=2.$

Problems involving two unknown quantities.

The sum of two numbers is 10; their difference is 2. What are the numbers? Ans. 4 and 6.

Divide 60 into parts such that the greater shall equal three times the less. Ans. 45 and 15.

Divide 72 into two parts such that $\frac{2}{3}$ of the greater shall exceed $\frac{5}{6}$ of the less by 3. Ans. 42 and 30.

If A gives B \$10, B will have $2\frac{1}{2}$ times as much money as A; but if B gives A \$10, A will have $1\frac{1}{3}$ times as much money as B. How much money has each? Ans. A has \$30. B has \$40.

Domestic Economy

.... *and* ....

Practical Home Economics

Industry sweetens our enjoyments, and seasons our attainments with delightful relish.—*Barrow.*

DOMESTIC ECONOMY is the science which treats of the skillful and economical management of the affairs in the home. It is based upon practical trial and our knowledge of the sciences, requiring both the actual experience in conducting and managing household affairs and a systematic study of the elements which make up the foods useful to man.

Primarily the household was managed in a simple manner, sometimes by very crude and unskillful methods, especially in households and in countries where the implements employed and the foods used were few, or the foods were limited to the productions within a particular section of the country. At that time the materials used for food were not only limited in number and kind, but those available were prepared for the table in only a few different ways. This gave to the household greater simplicity but limited the food supply to a very small list of nutritious articles.

In more recent times the bills of fare came to include a much larger variety of articles. This became possible because of rapid transit, enabling us to transport the food products from one section to another, bringing the productions of the tropical and warmer regions to the far distant colder sections. This vast field of transportation is only a factor in greatly diversifying the articles of food, of bringing the remote sections near to each other as it were, but a careful study of different foods as related to the requirements of the body has enabled us to prepare for the table in a great variety of ways the different products that are available in the household. For instance, at one time potatoes were served raw and later by boiling, but now there are very many ways of preparing and serving this product. What is true of potatoes is true of every article of food, the newer methods and utensils making it possible to serve inexpensively and yet in a variety of ways the standard foods, rendering them both beautiful to the eye and appetizing and nutritious to the body.

Health of First Consideration.

Domestic science places health as the first and most important element to be considered. Comfort and prosperity come to the household only where good health is enjoyed, although the wise use of money in the home is an important element in securing both comfort and prosperity. For this reason we must base the management of the home upon a strict observance of hygienic laws, letting this be a guiding principle in all we do, at the same time keeping in mind the wise use and economic expenditure of money and the prudent employment of the articles of food, apparel and furnishings which are purchased for the household.

Food is of course an essential to be considered, what we provide for the inner man, but we must be discriminating in selecting the most suitable varieties and in preparing and using them so they will be wholesome and digestible. This is very necessary in promoting the health, happiness and contentment of the home. Every article purchased must be useful for some purpose and its application must be judicious. In this sense domestic economy enables us both to save money and to spend it wisely. However, the income of the head of the family and the general environments of the household must be considered in determining what the expenditures should be, keeping always in mind that waste and extravagance are unwise and injudicious under all circumstances.

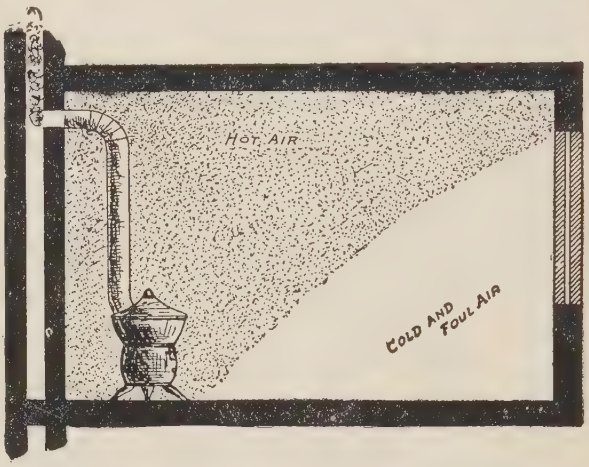
Heat, Ventilation and Clothing.

Heat. The normal temperature of the human body is between 98° and 99° Fahrenheit, varying very little, and it is important to maintain uniformity in the temperature of the home. Healthy adults require less heat than either children or old people, but in all cases the temperature can be a little lower if the individuals move about than when they sit still. The atmosphere within doors as a general rule may be maintained at from 60° to 65°, unless the occupants sit still, as in the school room, in which case the temperature should be from 65° to 70°. In old people and invalids the vital processes of the body proceed more gradually and they cannot take necessary exercises for maintaining the vital heat, hence they require more warmth than the average healthy adult. In children the relative amount of surface whereby the body loses heat is greater than in adults, hence the heat radiates more rapidly from the body. Even in healthy adults there is a difference in the requirements and for this reason the different rooms, such as the living room, dining room and bedrooms, should have heating facilities to suit their needs. The average degree of heat required for the different rooms should be ascertained and a thermometer should be provided so as to enable those having charge to regulate and obtain uniformity.

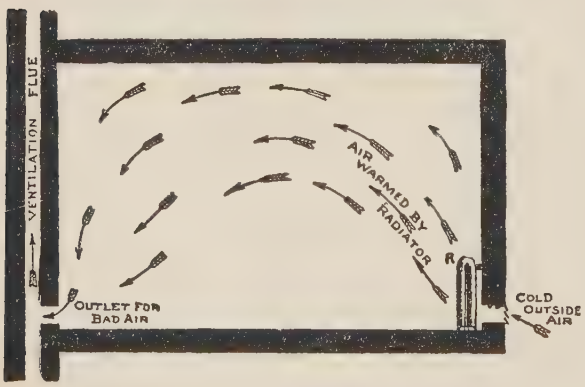
Power to regulate its own temperature is possessed by the human body. When the outer air is quite cold, then the body consumes more food and relatively more heat is produced to maintain the temperature. On the other hand, if the outer air is extremely warm, a relatively larger amount of blood is carried to the surface of the skin and the perspiration which is secreted passes to the surface of the body, where it evaporates, causing a lowering of the temperature to maintain the normal heat of the body. It will be seen that both of these processes are wasteful and that they consume the food and energy which are required for other purposes. As a rule, the excessive variations in temperature cause a

weakening of the system, owing to the fact that in either case they demand an extra amount of food and make greater demands upon the digestive organs, but leave less of the vitality of the food to build up brain energy. When the changes of temperature are extremely sudden and the body is not properly protected by clothing, the vitality is overtaxed and the individual is afflicted by what is commonly called "catching a cold."

VENTILATION. The object of ventilation is to supply pure air indoors. This is necessary because the processes of life functioning within the confinement of a poorly ventilated room operate to contaminate the air by diminishing the oxygen and increasing the nitrogen. The two processes of ventilation are to remove foul air and supply an equal amount of pure air. In a larger sense they include the removing or dilution of impurities, the regulation of moisture and the cooling or warming of the air Ordinary ventilation in the home has no effect on the quality of the air introduced, since it supplies only such air as surrounds the room or building to be ventilated, but in some instances, as in the case of some factories, the air may be filtered through meshes of wire or cotton cloth to remove particles of dust. Air is rendered impure where coal or gas are used for heating or oil and gas are employed for lighting. In some cases it is necessary to guard against air being either too dry or too moist, the former being overcome by spraying with water and the latter by employing warmth or a warm current of air for drying.



Effect of poor ventilation.



Well ventilated room.

All rooms should be properly lighted and as much sunlight as possible should be admitted. No artificial light is as wholesome as sunlight, hence the living rooms should be supplied with as much window space as possible and the amount admitted should be regulated by blinds that are easily controlled. If porches are attached to houses they should be so located and constructed that they will not obstruct sunlight from the rooms that are occupied by the family for the largest amount of time during the day.

Clothing. The kind and amount of clothing worn should be regulated according to the season of the year. As a general rule heavier clothing and of a darker color should be worn in the winter, while the clothing in the summer time should be lighter both in weight and color. Much care should be taken in changing clothing for the reason that a sudden change of this kind will often cause sickness or lead to indisposition. Care exercised in this respect will often do much toward maintaining health and evade entirely the need of paying doctors' bills.

Materials and Repairs.

It is true economy, both in food and clothing, to buy good materials. Cheap goods and unwholesome food are often the most expensive. We should never purchase any article because it is cheap, since this is false economy, and our purchases should be made only because the articles secured are valuable and are of use to us. The advice to purchase what is both good and needful applies to all articles used in the home, no matter whether they are food, table linen, decorations, tools and utensils or clothing. In all these matters we should not be "a penny wise and a pound foolish."

Everything of the household, whether indoors or outdoors, should be kept in a good state of repair. Frequently a very small outlay to make repairs avoids a much greater expense if something needing attention is neglected. Here, too, vill apply the old adage, "A stitch in time saves nine."

Practical Suggestions.

Every housewife should have a practical knowledge of foods and their values, no matter whether she is in the kitchen herself or supervises the work done by others in the kitchen. The young girl, irrespective of her station in life, should learn how to prepare and serve foods for the table in a healthful, attractive and economical manner. In fact, domestic science should be studied to the extent that all may learn the best and easiest methods of housekeeping. It should give us a scientific knowledge of foods and enable us to properly prepare and combine them so as to promote the greatest possible measure of health, contentment and domestic felicity.

Chemistry of Cooking.

Perhaps the most important step in domestic economy is to learn the changes in the composition of foods brought about by means or application of heat. There are four very important reasons why we should cook our food:

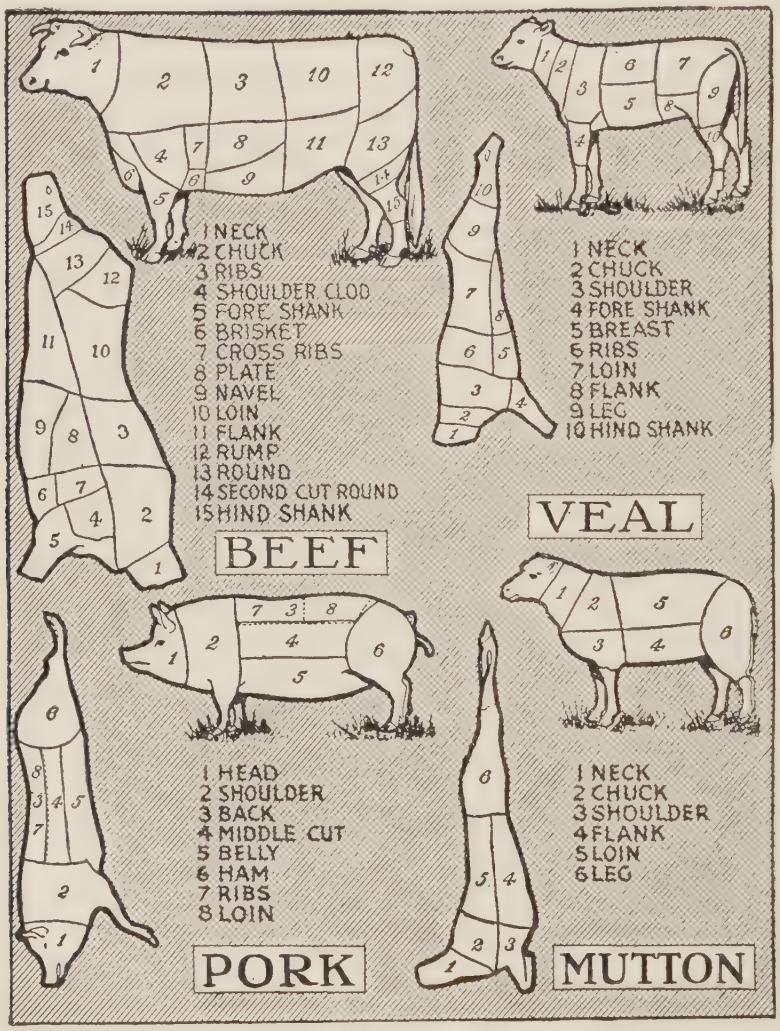
1. To change its mechanical condition so that it may be acted upon more readily by the digestive juices.
2. To make it more palatable, which increases the flow of saliva and stimulates other digestive functions.
3. To preserve and sterilize the food and kill disease germs.
4. To increase the digestibility of many kinds of foods.

Boiling Water.

When we heat water to the boiling point it sets free gases of the atmosphere which have been held in solution in the water, such as nitrogen, oxygen and

carbon dioxide. These gases are more dense in water than in the atmosphere, hence when we boil the water they expand and escape in the atmosphere, producing the bubbles which rise to the surface.

Water not only holds gases in solution, but likewise contains many dissolved mineral substances and bacteria and other organic matter. By boiling the water numerous harmful organisms or bacteria are killed and in that condition are rendered less injurious to health.



Cuts of Meat.

Meat will cook as quickly in a boiler with a small fire, though large enough to keep the water boiling, as it will if there is a raging fire and intense heat under it, unless the pot is covered and the steam becomes superheated. The small fire will do the best class of cooking because it will leave the meat more tender and juicy. The reason for this is that violent boiling causes the tissues to be ruptured and torn and removes the juices.

Water cannot be heated beyond the boiling point, which is 212° Fahrenheit at sea level, but it is lower as the altitude increases.

Cooking Meat.

The pleasing odor of cooking meat is due to the decomposition of fat and tissues. It is not necessary to heat water to the boiling point to coagulate the albumen. When fats are strongly heated they break up into fatty acid and glycerin. Fats that are subjected to high heat become granular when cooled, as, for instance, fried bacon. Cooking lessens the weight of meat and animal foods and in some cases diminishes the ease of digestion, which is true of oysters. It causes the water in meat to evaporate and permits the escape of juices and loss of fats.

In boiling meat to make broth, it should first be placed in cold water. This dissolves the albumen, flavoring matter and organic salts, producing small quantities of lactic acid, which acts upon the tissues of the meat and resolves it into a soluble form. At 134° temperature Fahrenheit albumen coagulates; at 160° it becomes a clear brownish scum. Greater heat converts the connective tissues into gelatin.

The longer meat is boiled the less nutritive it becomes, but the broth is made more wholesome. If the object is the meat instead of the broth, it is better to plunge the meat into boiling water at the start. This coagulates the albumen on the surface and prevents the escape of the juices. It should be kept in boiling water about ten minutes and then the temperature should be lowered to about 180° Fahrenheit. It should then be allowed to cook until it is tender. The water should cover the meat and should be replenished with boiling water.

Stewing Meat.

To stew meat, first place it in cold water to extract the juices and flavoring materials. The temperature of the water should be gradually raised to 180° Fahrenheit and kept at that point for several hours. Long stewing coagulates the albumen and makes the fibers dryer and firmer. The substances extracted from meat may be divided into three classes.

1. Meat extracts contain no gelatin, fat or albumen, hence have no food value. They are merely stimulants.
2. Preserved meat juices are obtained by pressure.
3. Predigested foods are obtained from meat by artificial digestion.

Suggestive Outline on Cooking.

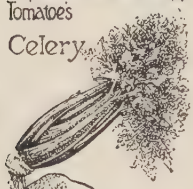
I. Effects of Heat and Cooking.
   1. To change mechanical condition.
   2. To improve flavor and taste.
   3. To sterilize food and kill bacteria.

II. Boiling Water.
   1. Temperature of boiling water (212° Fahrenheit).
   2. Reason and phenomena for bubbles.
   3. Mineral matters; why removed by boiling.
   4. Time required to boil food in water, such as eggs.
   5. Kills bacteria.
   6. Effects: a, On meats; b, On vegetables.

III. Meats.
   1. Boiling: Odor and taste.
   2. Action and results.
      a. Softens protein contents.
      b. Excessive cooking coagulates and hardens the albumen.

Lettuce

Tomatoes


Celery

White Potatoes

Egg Plant

Sweet Potatoes

Strawberries

Cabbage.

Poultry And Eggs

c. Breaks up the fats.
d. Forms fatty acids and glycerin.
e. Lessens the weight of meat.
f. In most cases decreases the ease of digestion.

3. How to make broth.
   a. Place in cold water.
   b. Action of the cold water.
   c. Effects of increasing temperature.
      1. Albumen coagulates at 134° Fahrenheit.
      2. Albumen rises as a scum at 160° Fahrenheit.
   d. Effect of long boiling: Improves the broth.

4. How to boil meat.
   a. First plunge into boiling water and boil for ten minutes.
   b. Lower the temperature to about 180° and boil from one to three hours, depending upon the kind of meat.
   c. Fish should not be plunged into boiling water, because the motion of the water tends to break the fish up into small parts.

5. How to boil where both broth and meat are to be used.
   a. First—Place in cold water in order to extract juices and flavoring extracts.
   b. Second—Slowly raise temperature to 180° and keep at this temperature for some hours.
   c. Effects of higher temperature on connective tissues, albumen and fibrin.
   d. Meat extracts.
      1. True meat extracts contain no gelatin, fat or albumen.
      2. Preserved meat juice is obtained by pressure.
      3. Predigested foods are obtained by artificial digestion.

6. Roasting meats.
   a. Difference between roasting and boiling.
   b. Loss of weight.
      1. Due to what? (Evaporation.)
      2. How checked? (By frequent basting.)
   c. Fire required.
   d. The smaller pieces require somewhat greater heat. Why? (To prevent the drying up of the juices.)

7. Broiling meats: A quick method of roasting.
   a. Method: First place on intensely hot surface.
   b. Reason: To coagulate the albumen and prevent escape of the juices.

8. Frying meats and vegetables.
   a. How different from other methods.
   b. Aim in frying vegetables.
      1. To soften and rupture the cellulose framework.
      2. To gelatinize the grain starches.
      3. To remove the cellulose covering of cells so that the digestive juices may act more readily.

IV. Baking Bread, Pastry and Cakes.

1. Object: To make materials more porous so that the digestive juices may act more freely.
2. The dough.
3. The leaven (usually yeast or baking powder).
   - A. Object: To raise the dough.
   - B. Effects.
     - a. Produces carbon dioxide. (This gas acts similar to steam.)
     - b. Causes fermentation of starch, producing alcohol.
     - c. Baking drives off the alcohol.

V. Cooking Vegetables.

1. Boiling.
   - A. Selection and value of vegetables.
   - B. Condition of green vegetables to cook.
   - C. How boil herbaceous varieties.
   - D. How boil roots and tubers. Reason why?
   - E. Why add baking soda in boiling vegetables that are a trifle old?
   - F. Increase of weight in boiling.
   - G. Blanching: a, Object of; b, Results; c, Time required.
   - H. Seasoning and finishing cooking.
   - I. Losses in cooking.
     - a. Potatoes with the peeling on (very little).
     - b. Potatoes peeled (50 per cent of mineral matter).
     - c. Carrots and other vegetables.
   - J. Effects.
     - a. Vegetable cellular tissue (softened).
     - b. Nitrogenous matter (coagulates).
     - c. Starch granules (absorb moisture, swell and burst).
     - d. Flavors are developed.
     - e. Above 125° the above changes begin.
     - f. Gases are developed and odors escape.
   - K. How cook vegetables and cereals.
     - a. Potatoes (Irish and sweet potatoes).
     - b. Turnips, cabbage, squash, beans, peas, apples, etc.
     - c. Cereals: Object in cooking.
       1. To break starch granules, thereby dissolving and gelatinizing the starch.
       2. To sterilize the material.
       3. To improve the flavor.
       4. To make the food more easily digested.
     - d. Long, slow cooking is better than rapid cooking.

The Kitchen.

The kitchen should be kept as orderly and with as much system as any room in the house. There should be a place for everything and all the utensils, when thoroughly cleaned after using, should be placed where they belong. Modern

kitchens have hooks, shelves and cabinets to receive all the utensils, including ladles, kettles and pots.

Recent reports of health officers show that disease is frequently carried by flies, hence they and other insects should not be permitted to infest the kitchen. Borax sprinkled on the floor and shelves at night will cause roaches to leave and ants are exterminated by using sage. Separate places should be provided for brushes, brooms, mops and wash rags.

The Dining Room.

Cleanliness and order in the dining room is a matter of pride to the correct housekeeper. All the dishes and table utensils should be cleaned after the meal to prevent them from tarnishing and to have them ready for the next service.

The Breakfast Table—How to Set It.

If the table is laid some time before the meal, the plates, cups and glasses should be turned to prevent dust and insects from getting into them.

It is a mark of thoughtfulness and attention to place the napkins and dishes on the table at the proper time before beginning a meal. A pitcher of water is always in order at this time. The victuals should not be placed on the table too soon but they should be served at the beginning of the meal, thus preventing them from becoming cold or stale before eating.

It is well to have a regular time for each meal of the day and each member of the family should be ready at this time. The service of the meal, when it is

ready and all are prepared for it, becomes a pleasant pastime. A cluster of fresh flowers gracefully arranged and fruit in season contribute much to the pleasure of the meal.

How and What to Eat.

At meal time all the cares of business should be forgotten and the attention should be directed to the selection of such food as is served. Only the quantity that will be eaten should be served to or be taken by any one. It is better to ask for a second helping than to take more on the plate than can be eaten. All classes of food should be well masticated so as to mix them thoroughly with saliva. The essential food substances known as vitamines, of which six are quite well known, should be taken into account in the study of nutrition.

The substances used for food may be classified in three groups, but it must be remembered that each group consists of a large variety of articles which are more or less healthful or nutritious to the body. These groups consist of minerals, proteins and compounds which contain no nitrogen. This is a practical subdivision and will answer the purpose in general housekeeping.

Mineral foods embrace substances which contain nitrogen as well as some which contain no nitrogen. Of these water is the principal food substance. In fact, all substances used for food contain water, the percentage ranging from 10 to 95. Every portion of the human body contains more or less water, the percentage of water in the body being from 66 to 75 per cent. Other minerals include iron, lime, soda, salt, iodine, phosphorus, etc.

The *proteins* may be classified as albuminoids, gelatinoids and extractives. These are all very important foods and in some forms are necessary to sustain life. Such foods as the gluten of wheat, the lean part of meat, the casein of milk and the white of an egg are among the important albuminoids. Gelatin is a typical form of the gelatinoids. These foods are digested easily. Extractives, such as beef tea, are much used for invalids and are obtained by pressure or by soaking meat in water at a temperature of 165° Fahrenheit.

The food substances which do not contain nitrogen include the two classes known as hydrocarbons and carbohydrates. The hydrocarbons are the heat-producing foods and include the oils and fats derived from animals and vegetables. Carbohydrates supply energy to the body, including some animal heat, and embrace sugar, starch and other substances of vegetable origin.

It has been determined by a long line of scientific investigation that the human body requires daily about one and three-fourth ounces of protein, about one and three-fourth ounces of fat and about sixteen ounces of carbohydrate foods. This may be explained more clearly by saying that these quantities of food are found in five and one-half ounces of beef, one and three-fourth ounces of butter, seven ounces of potatoes and eighteen ounces of bread. These elements are of course found in varying proportions in other fields and it does not follow that the same foods should be taken continuously. On the other hand, variety is the spice of life in eating as well as in all things essential to the body and mind.

Average Time Required for Cooking.

It is difficult to prescribe the exact time that food should be cooked, owing to the fact that size and age of the commodities as well as climatic and other conditions influence very materially. The following is a table that can be followed under ordinary circumstances:

Boiling.

	HRS.	MIN.		HRS.	MIN.
Asparagus		20	Codfish, Haddock, Halibut, Pike, Whitefish, per pound		6
Beans, Lima		35	Crawfish		15
Beans, navy	2		Lobster		30
Beans, string		25	Ham		15
Beef, corned		30	Lentils	2	
Beef, potted		35	Macaroni		20
Beef, smoked		20	Mutton		15
Beef, fresh, per pound		35	Onions		35
Beets		35	Parsnips		35
Brussels Sprouts		10	Peas		15
Cabbage		20	Peas, dried	2	
Cauliflower		20	Pork, salt		20
Carrots, young		50	Potatoes		25
Chicken		15	Rice		15
Corn, green		10	Spaghetti		20
Fish—			Spinach		15
Bass, Bluefish, Salmon and other oily fish, per pound		10	Turkey		15
Fowl		25	Turnips		30

Roasting.

	MIN.		MIN.
Beef, ribs, per pound	9 to 12	Game birds, small	15 to 25
Beef, round, per pound	10 to 16	Ham, per pound	20
Chicken, per pound	12 to 15	Lamb, per pound	12 to 15
Duck or Goose, per pound	18 to 20	Mutton, leg, per pound	12 to 15
Fillet of Beef	30	Mutton, saddle, per pound	10 to 12
Fish, large	50 to 60	Pork and Veal, per pound	20
Fish, small	15 to 25	Turkey, per pound	12 to 15
Game birds, large	30 to 40	Venison, per pound	10 to 12

Broiling.

	MIN.		MIN.
Beefsteak, 1 in. thick	10 to 12	Game birds	8 to 15
Beefsteak, 1½ in. thick	12 to 16	Lamb chops	8 to 10
Bluefish, Shad or Trout	20 to 25	Mutton chops	10 to 12
Chicken, spring	15 to 20	Pigeons	10 to 15
Fish, small	8 to 12		

Baking.

	HRS.	MIN.		HRS.	MIN.
Biscuits		20	Cake	1 to 1½ hrs.	
Bread, white	1		Cakes, small	20 to 50 min.	
Bread, rye, graham, etc.	2		Custard	1 hr.	

Questions.

Define domestic science. What can you say of its advancement?

By illustration compare the primitive methods of cooking with the present. Why should women study domestic economy?

How does the cost of living in a home where scientific cooking and management are observed compare with that of a home where they are not observed?

Why is health given such a prominent place in this study? What is the normal temperature of the body? The average temperature of a room should be how many degrees?

What advantage is there in ventilating a room through opening a window at the top? How can the air of a living room or office be supplied with the necessary amount of moisture? 2520.

Of what special value is sunshine in the house? Why should rules of sanitation be rigidly enforced?

What is the most economic rule in purchasing food and clothing? 2009.

Contrast the importance of repair work by nature and by people.

State some reasons for cooking food. Is cooked food always more digestible than raw food? Why is boiled water most pure?

Explain how to make broth; how to make soup; how to stew meat. Why are roasted and baked foods generally most wholesome?

What effect has leaven in bread? How long should bread be baked? Why is warm bread considered unwholesome? 365.

Name the chief mineral foods. Which two seem most valuable?

Why are flies considered a pest? What means should be employed to exterminate flies, ants and roaches?

Describe a modern kitchen. Name some of the latest improvements for the kitchen.

State the amount of food elements required by the human body daily and how these may be supplied. What benefits are derived from variety in foods?

Which is the most perfect of all foods? What is the food value of milk? 1027.

Define albuminoids, gelatinoids and extractives and tell how each is obtained.

Give a number of suggestions for comfort and cheer in the dining room.

The Home in Literature.

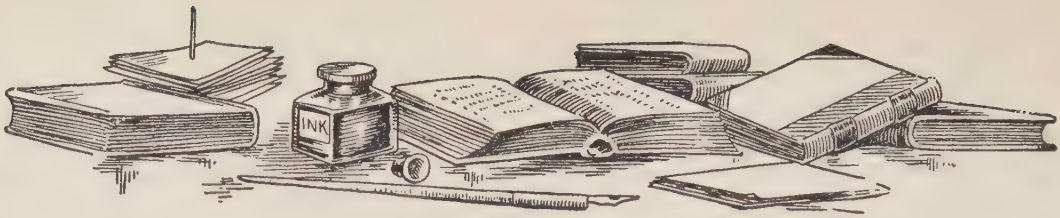
Beware of little expenses; a small leak will sink a great ship.—*Franklin.*

'Mid pleasures and palaces though we may roam,
Be it ever so humble there's no place like home.
—*Payne.*

Houses are built to live in more than to look on; therefore let use be preferred before uniformity, except where both can be had.—*Bacon.*

Nothing lovlier can be found
In woman, than to study household goods,
And good works in her husband to promote.
—*Milton.*

May not taste be compared to that exquisite sense of the bee, which instantly discovers and extracts the quintessence of every flower, and disregards all the rest.—*Greville.*



Penmanship.

Of all those arts in which the wise excel,
Nature's chief masterpiece is writing well.
—*Buckingham.*

WRITING is the art of expressing thought or recording ideas on paper or other materials by means of letters and other characters. This form of expressing thought was invented as a means of communicating with people after the inhabitants of the earth became so numerous that they could not remain in close contact. The earliest kind of writing was done by signs, such as were used in the very early period of Assyria, and this class of writing is known as *ideographic*. Modern writing, such as we use, is known as *phonographic* and employs letters or signs to represent sounds or words.

The Egyptians employed the so-called *hieroglyphic* system of writing in which ideas are represented by copying objects from nature. This system is known as *picture writing* and in more recent times has been supplemented by arbitrary signs. The Japanese still employ the brush in writing and illuminate their books in gold and colors.

Business writing is now done almost exclusively by machines called *typewriters,* of which there are many kinds on the market, but bookkeeping and personal correspondence necessarily employ hand writing to a very large extent. Shorthand writing, known as *stenography,* is employed where great rapidity is necessary and is taught generally in business colleges and in many public schools.

Writing by hand is called *penmanship* from the fact that it employs a pen. The pens were formerly made entirely of the quills of birds, taken from the wings and rectrices of the tail, but now they are manufactured from steel or aluminum. The study and teaching of penmanship, sometimes called *chirography,* is one of the important branches of learning and requires a large amount of practice and exercise work.

Methods in Penmanship.

Objects: a, Legibility; b, Rapidity; c, Endurance.
Position: a, Body; b, Feet; c, Arms; d, Head.
Movements: a, Finger; b, Forearm; c, Whole arm; d, Combined finger and forearm.
System: a, Slant; b, Vertical; c, Medial.

Objects.

The study and practice of writing involves the three points of legibility, rapidity and endurance. To secure legibility, the student must have a correct knowledge of the forms of letters, which is best impressed upon the mind by observing and practicing on correct copy, and the muscles must be trained carefully in order to make legible the writing. After reasonable legibility is obtained, it becomes necessary to practice with the view of securing rapidity as well as mastery of movement. Students develop endurance only by much practice

Certain forms may be employed to an advantage for the entire class, but the work must be changed or discontinued when the muscles become tired.

It must be recognized that all students acquire a tendency to write very similar to copy, or become imitators of the teacher, if they practice on specific forms throughout the course. For this reason it is quite necessary to variate the work from time to time. Ease of execution together with individuality in form are acquired if the practice work is sufficient. The matter of overcoming muscular rigidity by practice, such as closing fingers, raising and lowering arms and other calisthenic exercises, should likewise receive early attention in the course.

Position.

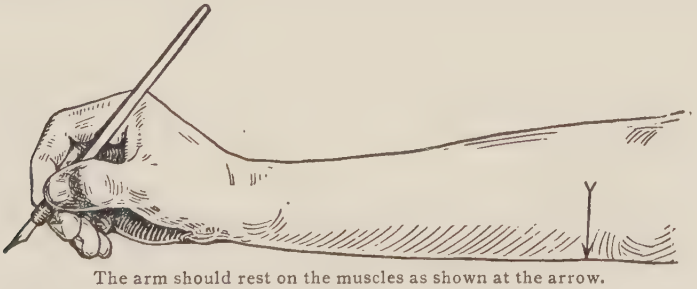
In order to secure correct position in writing it is necessary to have seats and desks well adapted to the size of the student. The learner should sit squarely before the desk, in an upright position, and the right elbow should rest on or near the lower right corner of the desk. The feet should rest squarely on the floor, making it necessary that the seat be fitted to the size of the student. Pupils should not be permitted to lean forward to rest their weight on the arm, but, instead, should sit upright so the arm will have entire freedom in movement.

Correct Position at the Writing Desk.

Movements.

The matter of employing specific movements in teaching writing must be determined to a large extent by the instructor. Students who are easy in their movements and acquire rapidly need only a few suggestions and usually employ a combination of movements. Primary grades should acquire freedom in the *finger movement* and the *whole-arm movement.* Business writing is done most successfully by the *forearm movement.* All these movements engage to a great extent the so-called *muscular movement,* which employs particularly the muscles of the arm from the shoulder to the wrist.

In holding the pen, the arm should rest on the muscle of the forearm just below the elbow, and the wrist should be kept slightly above the paper. This

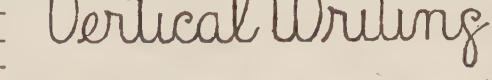


The arm should rest on the muscles as shown at the arrow.

will enable the hand to glide easily, the muscles of the arm serving as a pivot. Rapidity should be acquired by this exercise in the muscles of the thumb and fingers. Much practice work should be employed in addition to the regular exercises in writing.

Systems.

The systems of writing differ somewhat. Originally the writing was *vertical,* this representing more nearly the printed forms, but it gradually assumed a slant form because greater rapidity in writing can be obtained by this system. Vertical writing, such as is shown in the illustration, is more legible but requires more time in execution, the lines being simpler and having the roundness of letter forms. *Slant writing* is now taught more generally than any other, but in some schools the *medial* form is used, being a compromise between the slant and the vertical. As a general rule it is advisable to teach a system quite closely in the early grades, requiring the students to reproduce exact forms, and later to permit them to develop an individuality which will give tone and character to their penmanship.



Teaching Penmanship.

I. Teach the pupil to overcome muscular rigidity by giving suitable work. This work must consist of such physical exercises as will employ, at different times, all the muscles of the hand, arm and shoulder. Some pupils will need very little while others require a great amount of these exercises, depending upon how well they control the muscular movements and whether they have the necessary endurance to keep steadily at the work during the class exercises.

II. All pupils can not be expected to hold their fingers in exactly the same position, since the hand and fingers differ somewhat in size and construction. For this reason it is well to follow the lines of natural physical training at first and gradually induce the learners to acquire correct habits and usage as they progress.

III. The first exercises in the primary grades should be with the reading lesson. Pupils should first use pencils. The form of the letters must be fixed in the mind before students can be expected to write them correctly or rapidly. Pen and ink can be introduced as soon as some speed has been acquired, usually in the second grade.

IV. Good position and correct speed should always be insisted on in all cases. Where a class is at work, all the learners should be taught to work in unison and practice on the same lessons.

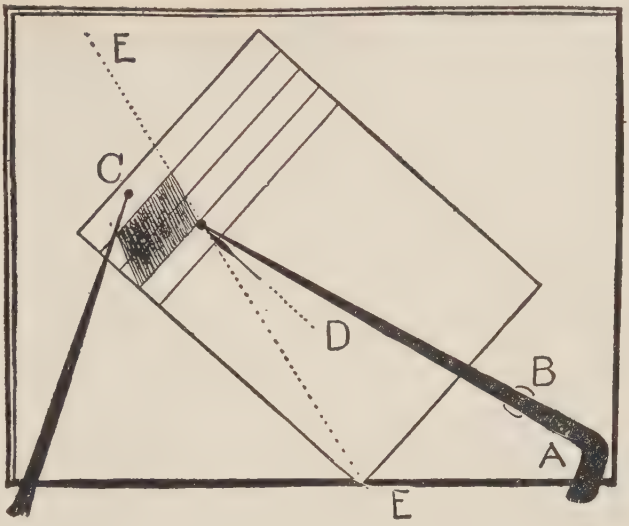
V. Aim to correlate movement in all written work. This can be accomplished only when the grade teacher, who is constantly with the pupils, has studied, digested and mastered the preceding steps. An expert penman and skilled teacher of writing—giving occasional lessons in the class—would accomplish but little in this stage of transition from movement drill to movement writing.

VI. Emphasize the element of speed application and movement direction in letters, parts of letters, words and connective lines. In this step, which is one of the most important in its bearing upon good formation, and consequently upon good writing, pupils must be taught that a line is the product of the motion used; that the motion preceding the contact of the pen to the paper must be in the direction of the line to be made, and that some lines being more complex than others should be made with less speed.

VII. Strengthen in pupils the power of observation and mental concentration as they have a bearing upon the relation of one letter to another in size, slant and spacings. This is an essential and final step in teaching writing embodying extreme legibility, rapidity, ease and endurance. Pupils who have not mastered this final step may secure good position and easy muscular movement in

all written work, but the writing is likely to be ragged and dissipated in appearance.

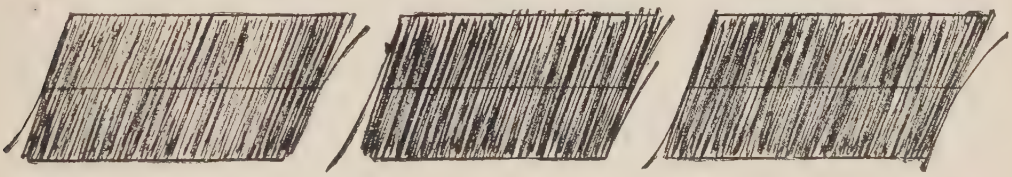
In the diagram is shown an outline of the top of a desk used in writing, giving the position of the writing paper on the desk, position of both arms, and the direction in which the pen moves to secure uniform slant. A represents the elbow of the right arm and its position on the desk; B, the muscular rest of the forearm; C, the position of the left hand; D, the penholder; E, the imaginary line along which the pen should move in making upward and downward strokes.



Exercises in Writing.

Exercise I.

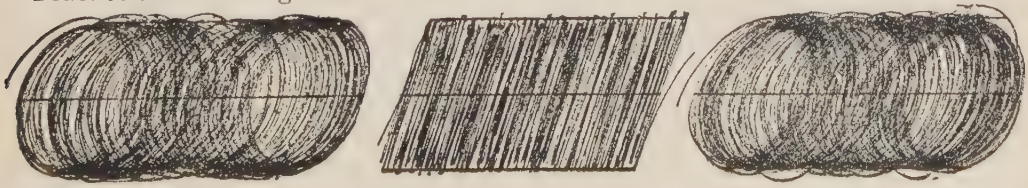
Study the exercises in this lesson carefully before the work is attempted. The closest possible attention should be given to penholding, muscular relaxation and position of the pupil. A good mental picture of the height, strokes, proportions and general appearance of these drills should be obtained by each pupil. Each section of the following illustration is made by one hundred counts:



Exercise II.

The teacher should carefully study the illustration which accompanies this exercise. Practice to count as the pupils do the work. Each downward stroke should be governed by a count and the upward stroke should not be counted. The advantages of counting are that the rapid student is held in check, the slow pupil is enlivened, and all the pupils soon learn to work in unison.

Correct speed should be acquired. The daily exercise should require a certain amount of work and this work must be done thoroughly. The second hand of a watch is a good guide in regulating the speed of the class. Count by tens as follows: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10—1, 2, 3, 4, 5, 6, 7, 8, 9, 20—1, 2, 3, 4, 5, 6, 7, 8, 9, 30, etc., continuing until one hundred or two hundred, depending on the length of the time available for the exercises. Frequently review former lessons. Practice the following drill:

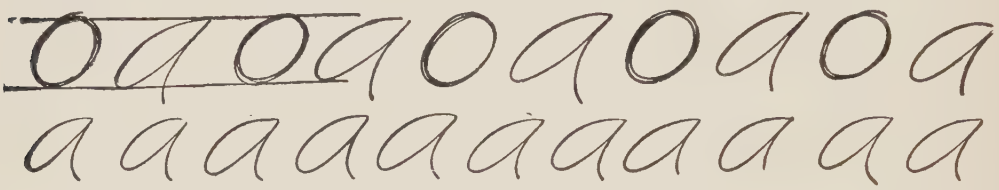


Exercise III.

In this exercise practice the compact oval. It is the repeated form of a large capital O. The best results can be obtained only when the mind and muscle work in perfect harmony. Study the figure carefully and see to it that the forms written have the proper slant and correct curves are obtained. A good plan is for the teacher to observe the work and repeat, "Rounder, rounder, wider, wider," etc., as the products need to be improved.

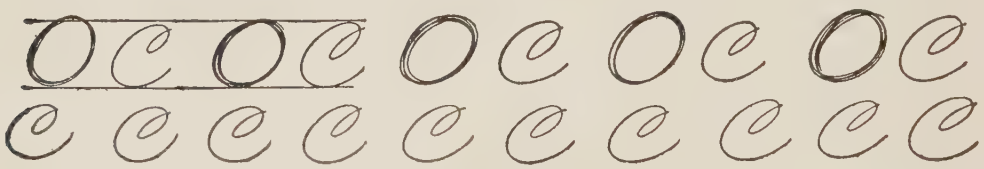
Exercise IV.

Here we begin to build the form of the capital letter A. Do not overlook counting as the pupils practice the movement. Notice the direction the pen should move, as indicated in the upper illustration. Practice this until perfect freedom is obtained and the muscles respond easily to the mind. After this preliminary drill, begin to produce the letter A, as shown in the second part of the illustration.



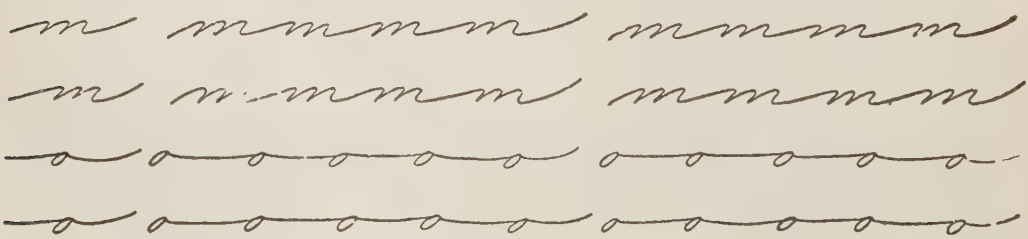
Exercise V.

Take a short time to speak about correct position of the body and arms. Open and close the fingers of the right hand; exercise the right arm by raising and lowering; see to it that all pupils hold the pen correctly. The illustrations in this exercise may serve for two or more daily lessons. In connection with them make reviews of previous lessons.



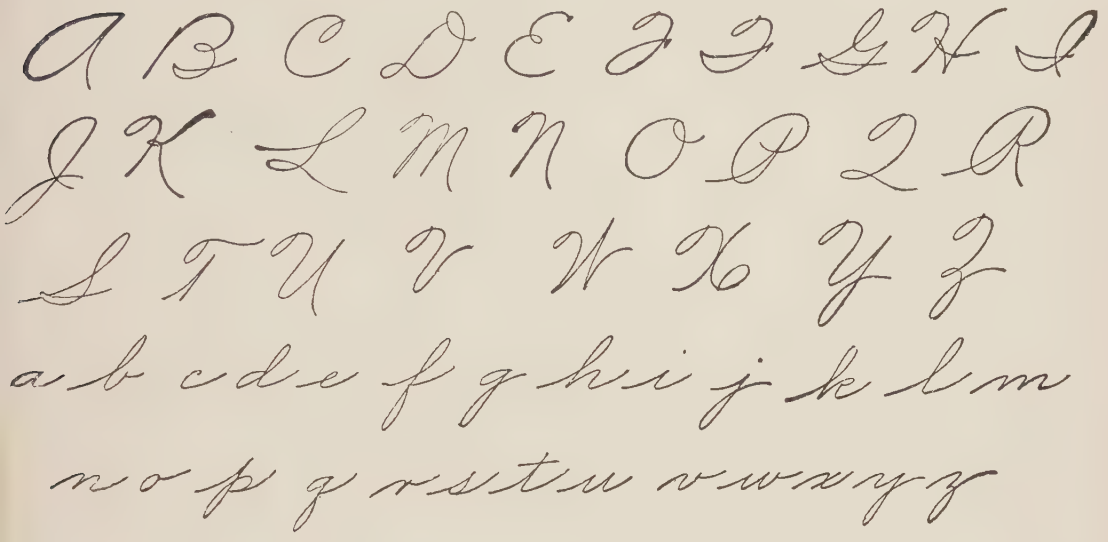
Exercise VI.

Practice is the essential element in learning to write a beautiful hand. Keep in mind the need of correctness in slant, height, size and heaviness or lightness of the lines. In this exercise are combined practice on the small letters o and m. Each of these should be the basis of several lessons. Aim at efficiency no matter how many days are required. Count for each downward stroke as before.



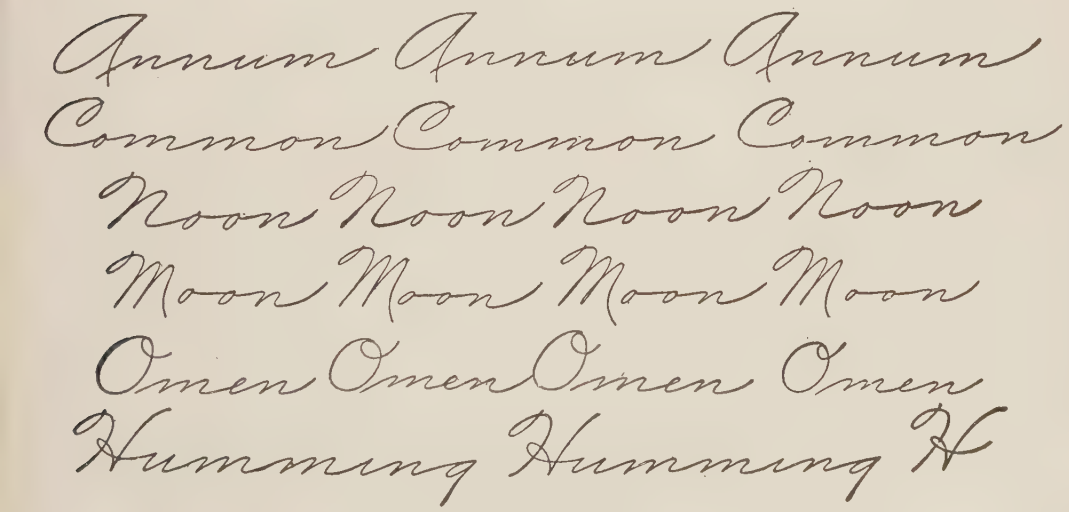
Exercise VII.

Drills on all the letters of the alphabet can be arranged by the teacher from the foregoing exercises. The students who studied and practiced the preceding carefully should be ready for any of the letters and figures.



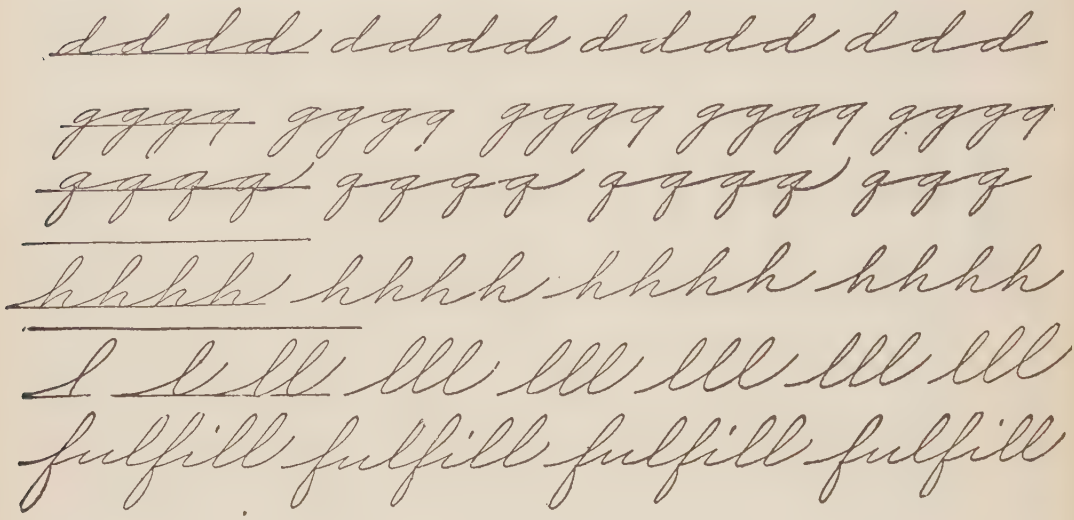
Exercise VIII.

The lessons suggested in this exercise are to be consecutive for several weeks, each lesson to be preceded by drill work and reviews of previous letters and movements. Students should write from fifteen to eighteen words in a minute. Frequently compare the work with the drill. Trace the capital letters at the beginning of the work in the air before putting the pen on the paper. This will impress the correct form on the mind. Combine other letters and words with the capitals given in this exercise.



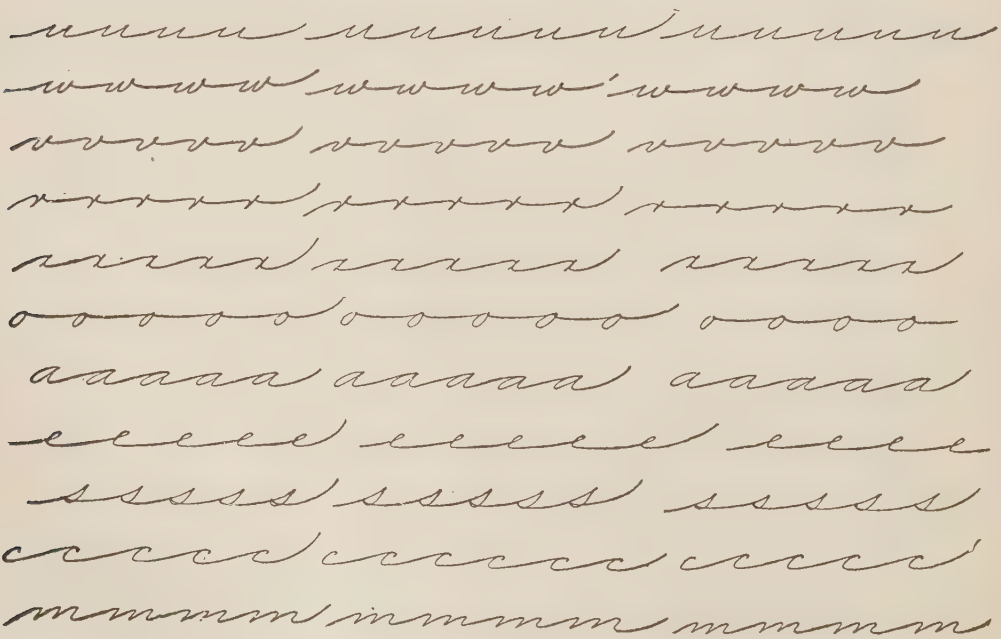
Exercise IX.

Refer to exercise VII. for an examination of the letters. Call attention to the loop or extension letters as capital J and small b, d, f, g, h, j, k, l, p, q and t. Notice the relative height and length of these letters. Exercise persistently on the following:



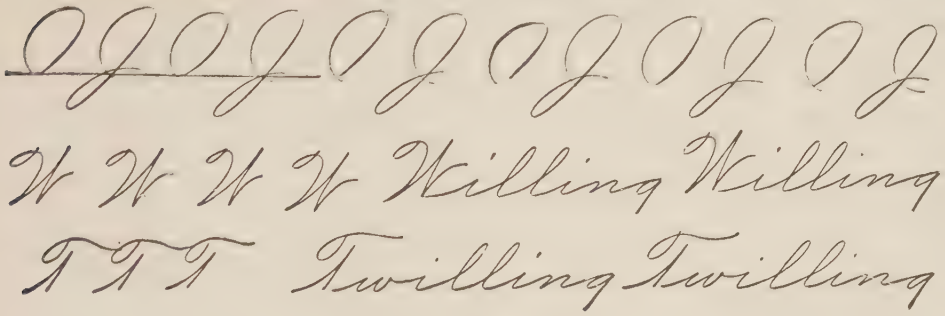
Exercise X.

Review the drill of the oval in exercise III. Frequently emphasize the right use of the eye in determining the size, form and slant of letters. The drills in this exercise may be variegated with other exercises and should occupy attention four or five days.



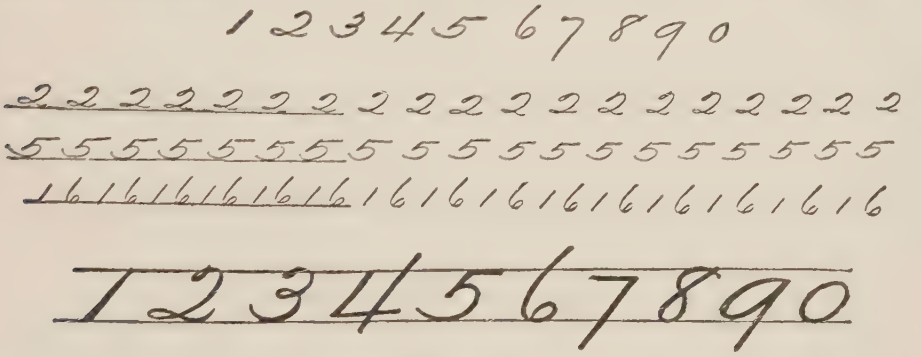
Exercise XI.

In drilling on capital letters, the teacher should refer frequently to exercise VII. The following will form a basis for various lessons:



Exercise XII.

Practice work in the figures should not be overlooked. Notice and call attention to the figures as they extend above and below the base line. The smaller figures in the illustration are to be used in pen work and the larger figures for blackboard exercises.



Questions.

Describe the methods of expressing thought before writing was invented. By whom was the hieroglyphic system used? 3188.

What can you tell of the Chinese system of writing? 566.

Define chirography and stenography. 2620.

State three objects to be obtained in penmanship.

In a brief way, state the correct position of the body and arms while writing.

Describe the movements of the fingers and arm in using the muscular movement.

Name and give example of three systems of penmanship.

State the advantages of vertical writing.

State the general advantages of the slant system in business writing.

Distinguish between the finger movement and the muscular movement in penmanship.

What place should observation and mental concentration have in a student learning to write? 645.

Suggest some means of relaxation before the writing period.

What advantages are obtained by counting for a writing class?

Give a list of the loop letters. Write all the one space, two space and three space letters.

How is one's character revealed by his handwriting?

Geography

Earth, thou fruitful source
Of all our raiment, life and food—
Our house, our parent, and our nurse.
—*Watts.*

GEOGRAPHY is the science which treats of the earth. It is usually divided into four branches or departments, each of which is more or less closely related to the others and to some of the important sciences, such as astronomy, geology and history. The four recognized departments of geography are mathematical, political, physical and commercial geography.

MATHEMATICAL GEOGRAPHY treats of the earth in its relation to the solar system and the laws governing terrestrial phenomena. It enables us to study the location of the earth in space and teaches us about the form, size and movements of our planet. This department likewise treats of the lines and circles imagined to be drawn upon the surface of the earth, representing the whole and portions of its surface on maps or charts, and treats of the length and changes of the seasons and the rise and fall of the tides.

POLITICAL GEOGRAPHY is associated more or less with history, giving a treatment of the social and economical activities of mankind. It embraces a treatment of the government, civilization and manner of life which characterize the different states and nations, including the locality of boundaries, cities and industries.

PHYSICAL GEOGRAPHY as a study embraces more or less of the essentials of geology, treating to some extent the internal constitution of the earth, but relating more particularly to its external appearance. More particularly, it embraces a treatment of the atmosphere, the natural divisions of land and water, the movements of the tides, the oceans and seas, and the living and lifeless objects found upon its surface.

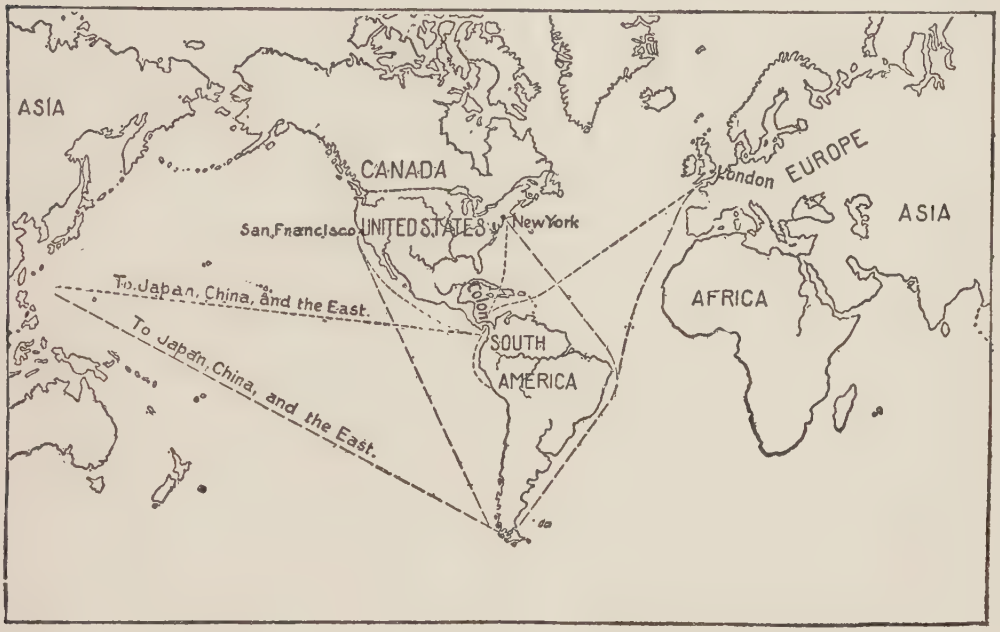
COMMERCIAL GEOGRAPHY is the science which investigates the migration of plants and animals, the routes of transportation, the production of useful commodities, and the development of trade and centers of industry. This branch of geography has been growing in scope and general interest with the larger development of railway building and oceanic commerce and communication through the agency of electricity, such as the cable and wireless telegraphy.

Methods in Geography.

Geography being an important branch of study in the public and private schools, it is essential to have a clear understanding of the purposes to be gained and the methods to be emphasized by both the student and the teacher. As a general rule, it is essential to study the locality near at hand and proceed from it to the remote and larger fields of investigation. Students should learn very early in their school course about directions and the points of the compass. For this reason the teacher should emphasize the cardinal and semi-cardinal points. Let the pupil at twelve o'clock stand with his back toward the sun, showing him in this simple way that his face is turned toward the north, his right hand toward the east, his left hand toward the west and his back toward the south. The

points half way between the cardinal points should be taught as soon as it is practicable.

As soon as the student is able to designate the points of the compass in the room and on the school ground, he may be asked questions about the direction he lives from the school house and in this way gradually impress the mind with the fact that distance is to be taken into account in studying the relative position



THE PANAMA CANAL AND ITS EFFECT ON TRANSPORTATION.

of localities. Later, when reasonable progress has been made, the lesson should be transferred to a sheet of paper and a plat should be prepared of the school ground and later of the township and other political subdivisions. From this simple and practical beginning the student can be led by degrees to the remote and more complicated.

Outline of Methods in Geography

1. Purposes Sought.
   - A. Intimate knowledge of local surroundings.
     - a. Plants.
     - b. Animals.
     - c. Physical features.
     - d. Occupations.
   - B. Principles and laws of the science of geography.
   - C. Application of general laws.
   - D. Cause and effect.
   - E. Exceptions by various local conditions.

2. Preparation of Instructor
   - A. Superior knowledge of subject at hand.
   - B. Ample supply of reference material.
   - C. Thorough acquaintance with current events and correlated subjects.
   - D. Knowledge of general and modern methods of instruction.
   - E. Ability to convert technical and scientific terms to student's grasp.

3. Equipment.

A. Modern text books.
B. Reference books.
C. Globes.
D. Maps and pictures.
E. Indexed clipping file.
F. Clay, sand and salt for modeling.
G. Drawing and painting materials for maps and illustrations.

4. Methods by Department.

A. Primary Grade.
a. Study home life, man, animals, birds, etc.
b. Proceed from local to distant homes.
c. Paint and cut animals, plants, scenes, etc.
d. Study relative directions, distances and locations.
e. Make plans of school room, playground, home and parks.
f. Learn simple geographical names.

B. Intermediate Grade.
a. Begin the use of text books.
b. Proceed to more general geography.
c. Take imaginary journeys.
d. Collect pictures and relics.
e. Make use of supplementary reading bearing upon geography.
f. Have pupils relate incidents of travel.
g. Familiarize pupils with names and conditions in county, district or parish.
h. Study cities.
1. Location.
2. Size.
3. Growth.
4. Commercial rank.
i. Illustrate lessons with sand and clay.
j. Begin map drawing on simple scales.

C. Grammar Grade.
a. Use text books and reference works daily.
b. Make free use of globes and maps.
c. Make files of clippings—Indexed.
d. Give attention to current magazine articles.
e. Draw maps to a scale.
f. Make contrasts and comparisons.
g. Study according to statistics and rank.
h. Study topics, using references and cross references.
i. Give careful attention to causes and effects.
j. Have pupils make lists of intelligent questions on lesson assigned and use best lists for whole class to study.
k. Let pupils prepare outline of some lesson to be used for study by the class.
l. Have brief lecture occasionally during class period by some prominent citizen who has traveled considerably.

Local Geography.

I. Introductory Lessons.

1. The Weather.

A. Sunshiny.
B. Cloudy.
C. Windy.
D. Calm.
E. Cold.
F. Warm.
G. Cool.
H. Rainy.
I. Snowy.
J. Sleety.
K. Foggy.
L. Sultry.

Keep a record each day by the month, showing the kinds of weather during the month.

Show the various effects of the different seasons on the following:

A. Vegetation. B. Animals C. People.

2. Surface.

   A. Kinds.

      a. Level.
      b. Rolling.
      c. Hilly.

   B. Slopes.

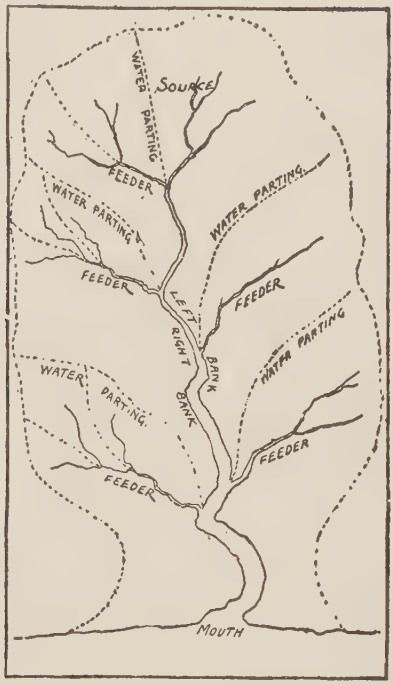
      a. Gentle.
      b. Steep.
      c. Abrupt.

3. Drainage.

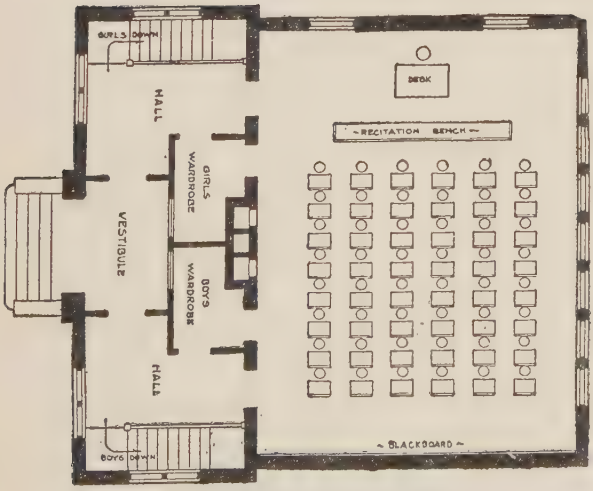
   A. Brook.
   B. Creek.
   C. Pond.
   D. River.

4. Map-drawing.

   A. Location.
   B. Direction.
   C. Distances.



MAP TO SHOW THE BASIN OF A BROOK OR CREEK.



PLAN OF A SCHOOL ROOM.

Draw a map of the school room in actual proportions, designating directions, locating stove, desks, doors, windows, fixtures, etc.

Draw a plan of the school building, showing the different rooms and halls on each floor.

Make a plan of the school premises, locating main building, out buildings, well, trees, walks, etc.

Locate other schools, public buildings, or homes by relative directions and distances

5. Things Found in the Earth.

A. Stone.
B. Slate.
C. Coal.
D. Gold.
E. Silver.
F. Copper.
G. Clay.
H. Iron.
I. Lead.
J. Zinc.
K. Oil.
L. Gas.
M. Water.
N. Sand.
O. Diamonds.
P. Cobalt.
Q. Gravel.
R. Marble.
S. Kaolin.
T. Salt.
U. Borax.

6. Things Growing on the Earth and in the Water.

A. Trees.
B. Grasses and grains.
C. Vegetables.
D. Fruits.
E. Flowers.
F. Weeds.
G. Fungi.
H. Mosses.

7. Animals.

A. Man.
  a. Civilized.
  b. Semi-civilized.
  c. Barbarous.
  d. Races.
  e. Nationalities.
B. Domestic.
C. Wild.
D. Uses.
  a. Food and clothing.
  b. Beasts of burden.
  c. Drafting.
  d. Pets.
E. Birds of prey.
F. Birds of song and plumage.
G. Edible birds and bird nests.
H. Fowl: wild and domestic.
I. Insects: useful and harmful.
J. Fishes: fresh water; salt water.
K. Reptiles: harmless; dangerous.
L. Crustaceans.

8. Occupations.

A. Agriculture.
  a. Farming.
  b. Stock raising.
  b. Fruit growing.
  d. Gardening.
B. Mining: where; how managed; results.
C. Manufacturing: where and what produced.
D. Transportation: railway, canal, caravan, steamship, automobile, flying machine.
E. Commerce.
  a. Chief articles.
  b. Where and when marketed.

Outline for Studying the Town or Township.

1. Location.

A. Relative position
B. Boundaries.
C. Sections.
D. Number of range.
E. Number or name of township.
F. Congressional.
G. Civil.

2. Area.

A. Number of square miles.
B. Number of districts.
C. Length and breadth.

SUBDIVISIONS OF THE TOWNSHIP.

3. Surface; Climate; Rainfall.

4. Natural Resources.

A. Soil.
B. Forests.
C. Grazing lands.
D. Mineral wealth.
E. Waterpower.
F. Navigable waters.

5. Inhabitants; Industries; Products; Markets.

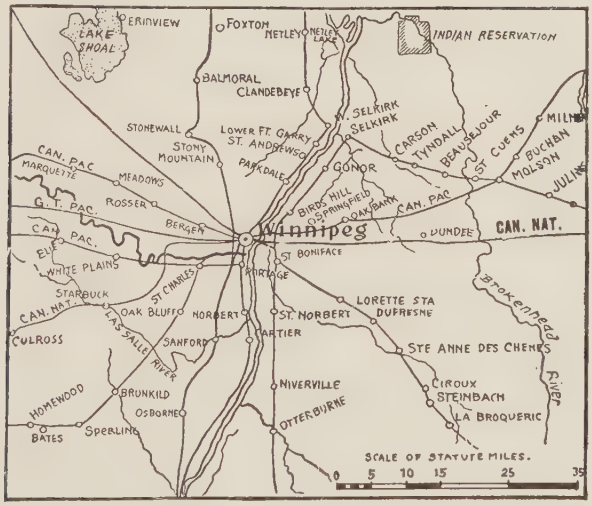
6. Government.
   - A. Officers: school; civil.
   - B. Elections.
     - a. When.
     - b. Where.
     - c. By whom.
     - d. Terms of service.
     - e. Duties of officers.
     - f. Salaries.
     - g. Meetings.

7. Means of Transportation and Travel.
   - A. Horses.
   - B. Oxen.
   - C. Camels.
   - D. Electric cars.
   - E. Cable cars.
   - F. Steam cars.
   - G. Steamboats.
   - H. Sail ships.
   - I. Automobiles.
   - J. Flying machines.

8. Education.
   - A. Public schools.
   - B. Private or parochial schools.
   - C. Colleges.
   - D. Universities.
   - E. Charitable institutions.

Outline for Studying a City or Incorporated Town.

1. Description.
   - A. Name and its origin.
   - B. Location and position; how determined.
   - C. Area: number square miles; extent of city limits.
   - D. Population: native born; foreign born; number of inhabitants.



   - E. Commerce and Industries.
     - a. Manufactures.
       1. Leading articles.
       2. Equipments.
       3. Persons employed.
       4. Annual output.
       5. Approximate value.
       6. Markets.
     - b. Shipping facilities.
     - c. Exports and imports.
     - d. Banking strength.

F. Advantages.
  a. Surrounding country: agricultural; mining.
  b. Railways.
  c. Navigation.
  d. Waterpower.
  e. Production of raw materials.
  f. Fuel: kinds; where obtained.
  g. Commercial rank.

G. Public Utilities.
  a. Water.
  b. Heat.
  c. Light.
  d. Traffic.
  e. Paving.
  f. Fire protection.
  g. Storm and sanitary sewers.
  h. Telephone.
  i. Public parks.

H. Principal buildings: public; private.

I. Education.
  a. Public schools.
  b. Private or parochial schools.
  c. Colleges.
  d. Universities.

J. Government.
  a. Form of rule: town, representative or commission.
  b. Officers: elective; appointive.
  c. Manner of election.
  d. Term of officers.
  e. Duties; uniforms.
  f. Salaries.
  g. How recalled.

K. History.
  a. Charter: when obtained.
  b. Organization as a village.
  c. Change to city.
  d. Noted citizens.
  e. Principal events.

L. Items of Interest.
  a. Principal streets.
  b. Boulevards.
  c. Natural scenery.

Outline of County, District or Parish.

1. Description.
  A. Name.
  B. Size.
  C. Name and number of townships.
  D. Boundaries.
  E. Position.
  F. Surface: hills; mountains; valleys.
  G. Drainage: creeks; rivers; ponds or lakes.
  H. Industries.
    a. Agriculture: farming; stock raising; dairying.
    b. Mining: chief products.
    c. Manufacture.
    d. Chief markets.
    e. Transportation facilities.
  I. Government.
    a. Officers of county.
      1. Name and number.
      2. How elected.
      3. Terms of office.
      4. Duties of officers.
      5. Salaries.
      6. How recalled.
    b. Taxes: amount levied; collection; use of public funds.
    c. Public buildings: court house; jail, etc.
    d. Institutions: charitable; educational; penal.
    e. Number of congressional or parliamentary district.

ILLINOIS

SOBRIQUETS

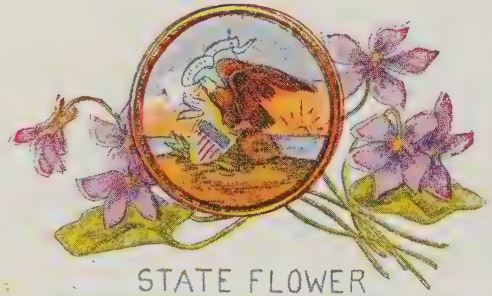
1-STATE-"PRAIRIE STATE"

2-PEOPLE-"SUCKERS"

ORIGIN OF NAME

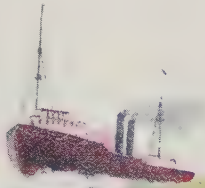
INDIAN WORD MEANING

"TRIBE OF MEN"



STATE FLOWER

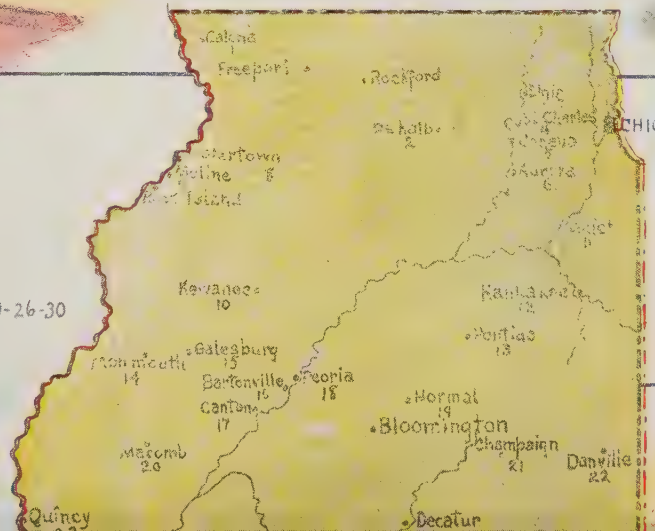
RAILROADS - 2nd



COMMERCE

STATE INSTITUTIONS

PRISONS - 11-29
BOYS' REFORMATORY - 4-13
GIRLS' REFORMATORY - 5
ASYLUMS - 8-12-16-31
NORMAL SCHOOLS - 2-7-19-20-26-30
SCHOOL FOR BLIND - 24
SOLDIERS' HOME - 22-23
UNIVERSITY - 21



MACHINE SHOPS - 7-10-18

PETROLEUM - 27 - 5th

(Method Book on tip btw. 552-553)

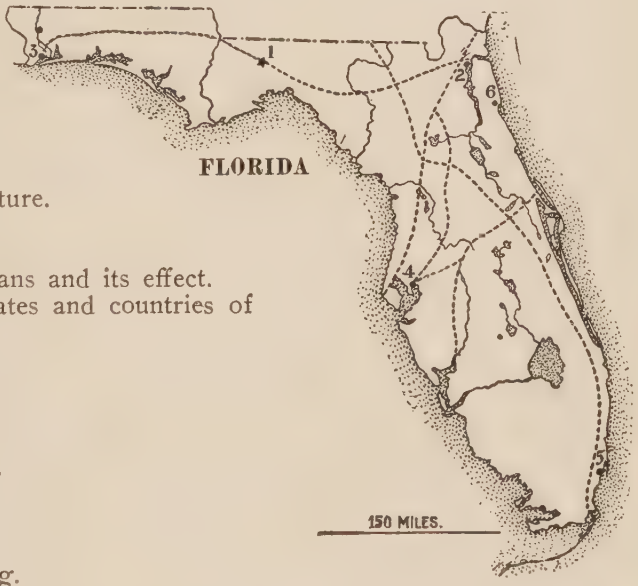
1st, 2nd, 5th, etc., above show the statistical rank of Illinois in production in the United States.

1, 2, 3, etc., refer to Illinois cities where industries or institutions are located and where articles are manufactured.

J. List and location of villages, towns, cities.
K. Seat of Government.
   a. Name and location.
   b. Rank among other cities.
      1. Population.
      2. Commerce.
      3. Natural advantages.
      4. Banking.
L. History.
   a. First settlers.
   b. Organization.
   c. List of noted men and women.
   d. Notable events.
   e. Items of interest.
   f. Transportation.

Outline for Studying a State or Province.

1. Name: Its Origin.
2. Location.
   A. Relative position in the country.
   B. Latitude and longitude.
   C. Boundaries: natural; by agreement or treaty.
3. Size: Length; Breadth; Area; Form; Comparative Size with Other States or Provinces.
4. Surface: Highlands; Lowlands; Plains; Watersheds.
5. Drainage.
   A. Rivers and tributaries.
   B. Lakes: size; depth; outlet.
   C. Adjacent waters.
6. Climate.
   A. Average temperature.
   B. Annual rainfall.
   C. Winds.
   D. Proximity to oceans and its effect.
   E. Compare with states and countries of similar latitude.
7. Occupations.
   A. Industries.
      a. Farming.
      b. Dairying.
      c. Stock raising.
      d. Lumbering.
      e. Mining.
      f. Fishing.
      g. Manufacturing.
      h. Transportation.
   B. Leading products: raw materials; manufactured articles.
   C. Chief exports and imports.
   D. Commercial centers. Why?



1, Tallahassee; 2, Jacksonville; 3, Pensacola; 4, Tampa; 5, Miami; 6, Saint Augustine. Chief railroads are shown by dotted lines.

8. Population: Native Born; Leading Nationalities.
9. Education.
   A. Public schools: common; high; normal; technical; industrial.
   B. Colleges.
   C. Universities.
   D. Parochial or private.
   E. State or provincial institutions.

10. Government.
    A. Departments: executive; legislative; judicial.
    B. Officers.
        a. Number and name.
        b. Election.
        c. Term of office.
        d. Duty and salary.
    C. Number and names of parishes, counties or districts.
    D. Number of senators and representatives.
    E. Members in national congress or parliament.
11. Capital and Principal Cities.
12. Statistics.
    A. Population at latest census.
    B. Density of population.
    C. Rate of increase in population.
    D. Annual productions: raw materials; manufactured articles.
13. History.
    A. First settlements.
    B. Organization as territory.
    C. Admission to Confederation or Union.
    D. Historical events and localities.
    E. Prominent personages.

Questions on Elementary Geography.

What is geography? Name and define the four recognized departments into which it is divided. 1112.

What are the chief purposes to be sought in studying this branch?

Give a list of equipments necessary to the successful study of geography. Briefly state the preparation an instructor should have.

State fifteen practical suggestions for methods in studying geography.

What is a township? Tell how it is divided and subdivided. By a drawing locate the following land: The east half of the north half of the northeast quarter of section 12.

What is a county seat and how is it located? What are charitable institutions? Name and locate the government institutions of your own state or province.

When may a town be said to be incorporated? When does it become a city? Name the chief officers of your own town and describe its government.

How are boundaries of states and countries fixed? How and when are the census obtained?

Distinguish between a territory, a state and a province.

Prepare a drawing to show the basin of a river, indicating the source, the mouth, and at least five contributaries.

Define our system of education, explaining the meaning of common and high school, normal school, parochial or private school, and university.

Advanced Geography.

Solar System.

1. Define the following:
    A. Sphere.
    B. Sun.
    C. Planet.
    D. Moon.
    E. Fixed star.
    F. Comet.
    G. Solar system.
    H. Circle.
    I. Ellipse.
    J. Focus.

(Method Book, Opp. 555)

CREVASSE OVER 200 FEET DEEP IN MUIR GLACIER, ALASKA

K. Diameter.
L. Circumference.
M. Orbit.
N. Ecliptic.
O. Aërolite.
P. Plane of ecliptic.

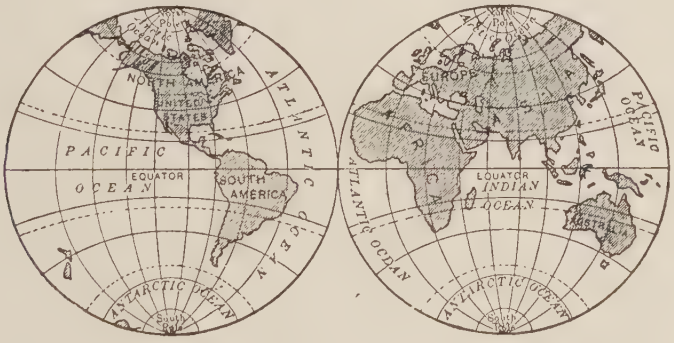
2. Name planets in order from the sun and draw an illustration of the orbits.

MOON.

1. Distance from earth.
2. Revolution.
3. Rotation.
4. Orbit.
5. Nodes.
6. Phases.
7. Eclipses: of moon; of sun.
8. Physical features: shape; size; etc.
9. Why is the same side of the moon always toward the earth?

EARTH.

1. Shape: proofs.
2. Density.
3. Motions: proofs.
4. Relative size compared with sun, moon, etc.
5. Diameter: equatorial; polar.
6. Axis and its inclination.
7. Circles and lines.
   A. Circumference.
   B. Great circle.
   C. Small circle.
   D. Equator.
   E. Tropics.
   F. Polar circles.
   G. Meridian.
   H. Prime meridian.
   I. Parallel.
   J. Horizon.
   K. Isothermal lines.
   L. Date line.
8. Surface.
   A. Mountain.
   B. Plain.
   C. Plateau.
   D. Valley.
   E. Watershed.
   F. Canyon.
   G. Glacier.
   H. Avalanche.
   I. Volcano.
   J. Desert.
   K. Plains.
   L. Reefs.
9. Indentations and projections.
   A. Gulf.
   B. Bay.
   C. Cape.
   D. Isthmus.
   E. Strait.
   F. Fiord.
   G. Estuary.
   H. Delta.
   I. Promontory.
10. Drainage: river; lake; sea; ocean.



HEMISPHERES, SHOWING PARALLELS AND MERIDIANS.

11. Land divisions: hemisphere; grand division; continent; country; island.

12. Define the following:
   A. Aurora borealis.
   B. Basin.
   C. Capital.
   D. Capitol.
   E. Cardinal.
   F. Cataract.
   G. Climate.
   H. Currents.
   I. Cycle.
   J. Degree.
   K. Detritus.
   L. Diurnal.
   M. Erosion.
   N. Export.
   O. Iceberg.
   P. Import.
   Q. Latitude.
   R. Longitude.
   S. Metropolis.
   T. Poles.
   U. Range.
   V. System.
   W. Zenith.
   X. Zones.

Races of Man.

1. Caucasian or White race.
   A. Superior to all others; most numerous.
   B. Characteristics: High forehead; heavy beard; regular features.
   C. Home: Most of Europe; northern and southern Africa; America; India; Arabia; Australia.
2. Mongolian or Yellow race.
   A. Constitute one-third population of the earth.
   B. Characteristics: Almond-shaped eyes; scanty beard; high cheek bones.
   C. Home: Japan; China; parts of Turkey and Hungary; Lapland; Finland; Arctic regions.
3. Black or Negro race.
   A. Characteristics: Black wooly hair; scanty beard; thick lips; low forehead.
   B. Home: Central Africa; New Guinea; parts of America.
4. Malay or Brown race.
   A. Characteristics: Horizontal eyes; full beard; straight black hair.
   B. Home: Malay Peninsula; islands of Pacific.
5. American Indian or Red race.
   A. Characteristics: Black hair and eyes; high cheek bones; scanty beard.
   B. Home: America.
6. Population of earth: 1,515,000,000.

Religions.

1. Christian: Based upon both the Old and the New Testament.
   A. Number: 573,082,533.
   B. Divisions: Protestant; Roman Catholics; Greek Orthodox; Church of Abyssinia; Arminians.
2. Jewish: Jews believe in the Old Testament but reject the New.
   A. Number: 11,800,000.
3. Mohammedan: Founded by Mohammed, author of the Koran, which is the sacred scriptures of their belief.
   A. Number: 250,000,000.
4. Brahminical: Based upon belief that after many transmigrations the soul finally loses its individuality and becomes merged in Brahm, the supposed soul of all things.
   A. Number: 210,000,000.
5. Buddhist: Founded by Buddha; similar to Brahmanism.
   A. Moral code is excellent, being similar to that of Christianity.
   B. Number: 147,900,000.
6. Confucianism: The code of morality taught by Confucius and his disciples.
   A. Number: 200,000,000.

Eastern Hemisphere.

1. Location and boundaries.
2. Draw a map of the hemisphere.
   A. Locate the equator, tropics, polar circles, boundary meridians, prime meridian, meridian of 80°, Asia, Africa, Europe, Australia, East Indies, Oceans, Seas, etc.

3. Area: Land surface of entire hemisphere—about 35,000,000 square miles.
   A. Asia: 17,000,000
   B. Africa: 11,000,000
   C. Europe: 3,800,000
   D. Australia: 3,000,000

4. Population: Entire, about 1,345,000,000.
   A. Africa: 140,000,000
   B. Asia: 860,000,000
   C. Australasia: 5,000,000
   D. Europe: 340,000,000

Western Hemisphere.

1. Location and boundaries.
2. Draw a map of the hemisphere.
   A. Locate equator, tropics, polar circles, boundary meridians, meridian of 100°, North America, South America, Greenland, Caribbean Sea, Gulf of Mexico, New Zealand, Sandwich Islands, Oceans, etc.
3. Area: About 16,000,000 square miles.
   A. North America: 8,350,000
   B. South America: 7,700,000
4. Population: About 170,000,000
   A. North America: 135,000,000
   B. South America: 65,000,000

Oceans and Seas.

1. Draw outline map of each ocean.
   A. Give boundaries, equator, tropics, polar circles, currents, principal islands.
   B. Discuss dimensions, area, depth, temperature, currents, tides, etc.
   C. Compare depth of water and elevation of land.
   D. Draw map showing principal steamship lines; cable lines.

North America.

1. Location and boundaries.
2. Draw map locating tropic of cancer, arctic circle, parallel of 49° north latitude, Dominion of Canada, Alaska, Greenland, United States, Mexico, Central America, West Indies, Bahama Islands, Gulf of Mexico, Great Lakes, Hudson Bay, Rocky and Appalachian Mountain systems, etc.
3. Area: Length; breadth; rank in size.
   A. Square miles: 8,350,000.
      a. Dominion of Canada: 3,750,000
      b. United States: 3,743,000
      c. Alaska: 591,000
      d. Mexico: 767,500
      e. Central America: 211,000
      f. West Indies: 93,500
4. Population.
   A. Total: 125,000,000.
      a. Dominion of Canada: 7,878,895
      b. United States: 105,683,108
      c. Alaska: 65,000
      d. Mexico: 15,500,000
      e. Central America: 5,600,000
      f. West Indies: 7,200,000
   B. Races: Caucasian, Negro, Indian, Mongolian.
5. Surface
   A. Appalachian system.
      a. Mountain ranges.
         1. White Mountains.
         2. Green Mountains.
         3. Adirondacks.
         4. Catskill.
         5. Blue Ridge.
         6. Cumberland.
         7. Allegheny.

B. Rocky Mountain system.
   a. Mountain ranges.
      1. Rocky Mountains.
      2. Cascade Range.
      3. Sierra Nevada.
      4. Coast Range.

C. Plateaus and Plains.
   a. Atlantic Coastal Plain.
   b. Piedmont Plateau.
   c. Cumberland Plateau.
   d. Great Central Plain.
   e. Ozark Plateau.
   f. Columbia Plateau.
   g. Colorado Plateau.
   h. Great Basin.

6. Drainage.
   A. River systems.
      a. Atlantic.
      b. Arctic.
      c. Gulf.
      d. Great Basin.
      e. Saint Lawrence.
      f. Columbia.
      g. Colorado.
      h. Mississippi.
   B. Lakes: Great Lakes; lakes of the north, east and south.

RELIEF MAP OF NORTH AMERICA.

7. Climate: Temperature; rainfall; winds and storms.
   A. Compare northern and southern parts, eastern and western, coastal and inland, highlands and plains.
   B. Give reasons for difference in temperature and moisture.

Questions on Advanced Geography.

Give several proofs that the earth is round. What explanation is given for the earth being a spheroid rather than a sphere? 855.

Distinguish between the rotation and the revolution of the earth and state the effects of each.

Illustrate by a drawing the change of seasons. 2575. What kind of weather have they in Central Africa at our Christmas time?

When it is noon at Washington, D. C., what time is it at Bahia, Brazil?

Which way do shadows fall at noon in the islands of Sumatra? Why?

What are some of the evidences of intense heat within the earth? Name and locate some famous hot springs, geysers and volcanoes. 1135.

Describe the action of the trade winds and the westerlies. How do mountains and winds affect the rainfall of a country? 3159.

What is the cause of tides? What and where are the greatest ocean currents and what is their importance? 2876.

Make a list of the more important plants and animals of each zone. 3224.

How do you account for the difference in climate between Quebec and London? Between San Francisco and New York City?

What and where is the International Date Line? Locate the prime meridian and state its use. 1397.

Which countries are the most densely populated, and why? Where are the savage tribes living today? Where do the most civilized people live?

How may good governments greatly promote trade? How do natural resources affect the manufacturing and other industries of a locality?

Name some important trade centers of the various countries, both inland and coastal. How have they become so?

Where are the principal forest regions of the world? Name the chief products derived. 1031.

Which countries rank first in mineral wealth? Indicate by a world map the distribution of gold, silver, copper, iron and coal.

Name the leading manufacturing nations of the world and give the chief articles of export of each.

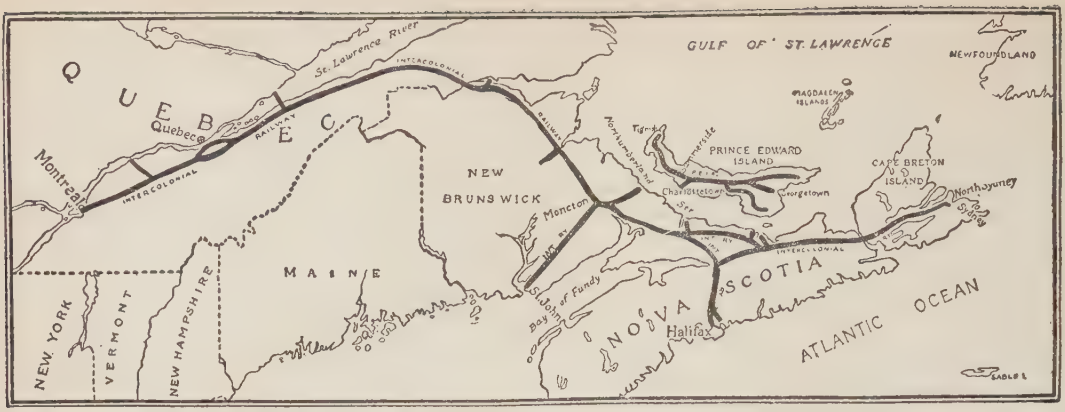
Dominion of Canada.

1. Location and boundaries. Area: 3,745,574 square miles.
2. Draw map locating Arctic Circle, parallel of 49°, Nova Scotia, New Brunswick, Prince Edward Island, Quebec, Ontario, Manitoba, Saskatchewan, Alberta, British Columbia, Yukon, Northwest Territories, coast of Labrador. Locate chief cities.
3. Draw physical map, locating mountains, highlands, rivers, lakes, etc.
4. Surface.
   A. Northern extension of Appalachians in eastern provinces.
   B. Rocky mountains and Cascade range along western border.
   C. Arctic plain sloping north and east.
   D. Other mountains: Laurentian, Cobequid, Notre Dame, Hooker, Brown.
5. Capes and Peninsulas: Bathurst, Breton, Sable, Gaspé, Canso, Scott, Hurd, Labrador, Nova Scotia.
6. Islands: Queen Charlotte, Vancouver, Manitoulin, Prince Edward, Anticosti, Cape Breton, Magdalen, Thousand Islands.

7. Gulfs and Bays: Fundy, Chaleurs, Miramichi, Saint Lawrence, Georgian, Hudson, Baffin, James, Ungava, Mackenzie.
8. Straits and Sounds: Hudson, Belle Isle, Northumberland, Canso, Queen Charlotte, North Channel, Juan de Fuca.
9. Lakes: Great Bear, Great Slave, Athabasca, Winnipeg, Winnipegosis, Manitoba, Saint Peter, Lake of the Woods, Rainy.
10. Rivers: Saint Lawrence, Ottawa, Saguenay, Saint Maurice, Sorel, Saint John, Red River of the North, Assiniboine, Nelson, Saskatchewan, Churchill, Athabasca, Fraser, Peace, Mackenzie, Yukon, Albany, East Main, Qu'Appelle, Rainy, Restigouche.
11. Climate.
    A. Long, cold winters and short, pleasant summers, especially in south.
    B. Province of Quebec is colder in winter and warmer in summer than Ontario, except in the extreme northern part.
    C. Manitoba, Saskatchewan and Alberta have pleasant summers and cold winters, but the climate is exceptionally healthful.
    D. British Columbia and large portion of western part have remarkably mild winters, owing to warm ocean currents of the Pacific.
    E. Northern part is too cold to be productive or habitable.
12. Population, 1911, 7,204,527, of which 3,924,394 was rural population and 3,280,444 was urban population; population 1921, 8,788,483.
    A. In 1911 the density of population per square mile was 1.93, a slight increase over 1901, when it was 1.44.
    B. Races and nationalities represented; C. Religion: Protestant; Roman Catholic.
13. Exports, 1923, $945,295,837; imports, 1923, $802,579,244.
14. Cities: Ottawa, Ont., is the capital. The following cities had a population of over 10,000 in 1921:

	1911	1921		1911	1921
Montreal, Que.	470,480	618,506	Saint Thomas, Ont.	14,054	16,026
Toronto, Ont.	376,538	521,893	Brandon, Man.	13,839	15,397
Winnipeg, Man.	136,035	179,087	Moose Jaw, Sask.	13,823	19,285
Vancouver, B. C.	100,401	117,217	Trois Rivieres, Que.	13,691	22,367
Ottawa, Ont.	87,062	107,843	New Westminster, B. C.	13,199	14,495
Hamilton, Ont.	81,969	114,151	Stratford, Ont.	12,946	16,094
Quebec, Que.	78,190	95,193	Owen Sound, Ont.	12,558	12,190
Halifax, N. S.	46,619	58,372	Saint Catherines, Ont.	12,484	19,881
London, Ont.	46,300	60,959	Saskatoon, Sask.	12,004	25,739
Calgary, Alta.	43,704	63,305	Verdun, Que.	11,629	25,001
Saint John, N. B.	42,511	47,166	Moncton, N. B.	11,345	17,488
Victoria, B. C.	31,660	38,727	Port Arthur, Ont.	11,220	14,886
Regina, Sask.	30,213	34,432	Charlottetown, P. E. I.	11,198	12,347
Edmonton, Alta.	24,900	58,821	Sault Sainte Marie, Ont.	10,984	21,092
Brantford, Ont.	23,132	29,440	Chatham, Ont.	10,770	13,256
Kingston, Ont.	18,874	21,753	Lachine, Que.	10,699	15,404
Peterborough, Ont.	18,360	20,994	Galt, Ont.	10,299	13,216
Hull, Que.	18,222	24,117	Sarnia, Ont.	9,947	14,877
Windsor, Ont.	17,829	38,591	Belleville, Ont.	9,876	12,206
Sydney, N. S.	17,723	22,545	St. Hyacinthe, Que.	9,797	10,859
Glace Bay, N. S.	16,562	17,007	Niagara Falls, Ont.	9,248	14,764
Fort William, Ont.	16,499	20,541	Lethbridge, Alta.	9,035	11,097
Sherbrooke, Que.	16,405	23,515	Levis, Que.	9,703	10,470
Kitchener (Berlin), Ont.	15,196	21,763	St. Boniface, Man.	7,483	12,821
Guelph, Ont.	15,175	18,128	Outremont, Que.	4,820	13,249
Westmount, Que.	14,579	17,593	Shawinigan Falls, Que.	4,465	10,625

15. Occupations: Agriculture, mining, stock raising, commerce, fishing, furring, manufacturing, etc.
    A. Cereals are grown very extensively, including chiefly wheat, oats, barley, rye, flax and corn. Winnipeg is the largest wheat market in the British Empire. Corn culture is confined chiefly to Ontario.
    B. Lumbering is an extensive industry in Ontario, British Columbia and Quebec. Many of the forests are very valuable.



RAILROAD OWNED BY THE GOVERNMENT OF CANADA.

C. The minerals include coal, gold, silver, cobalt, salt, petroleum, nickel, gypsum, asbestos, graphite, iron, and mica. Ontario produces about half of all the nickel mined in the world and has a large yield of cobalt, copper and salt.

D. Fruits are grown in large quantities for the market and for the export trade, particularly apples. Other fruits include peaches, grapes, plums, pears, apricots and shrubbery.

E. Dairying has attained a high state of development in Ontario, New Brunswick and Manitoba. Cheese and milk are exported.

F. The fisheries of Canada take high rank among the nations, particularly those of salmon, cod, lobster, whitefish and sardines. British Columbia has some of the finest salmon fisheries and canneries in the world. Nova Scotia and Prince Edward Island yield large catches of cod.

G. Vegetables thrive throughout the southern part of Canada and are grown extensively. They include potatoes, cabbage, onions, turnips, celery, tomatoes, parsley, beans, peas, lettuce, etc.

16. Government: Colonial possession of Great Britain with home government by the people.

A. Executive department.

a. Governor-General appointed by the Crown.

b. Privy Council presided over by the Premier.

c. High Commissioner for the Dominion in Great Britain.

B. Legislative department consisting of Dominion Parliament.

a. Senate of 87; members appointed for life by the Governor-General.

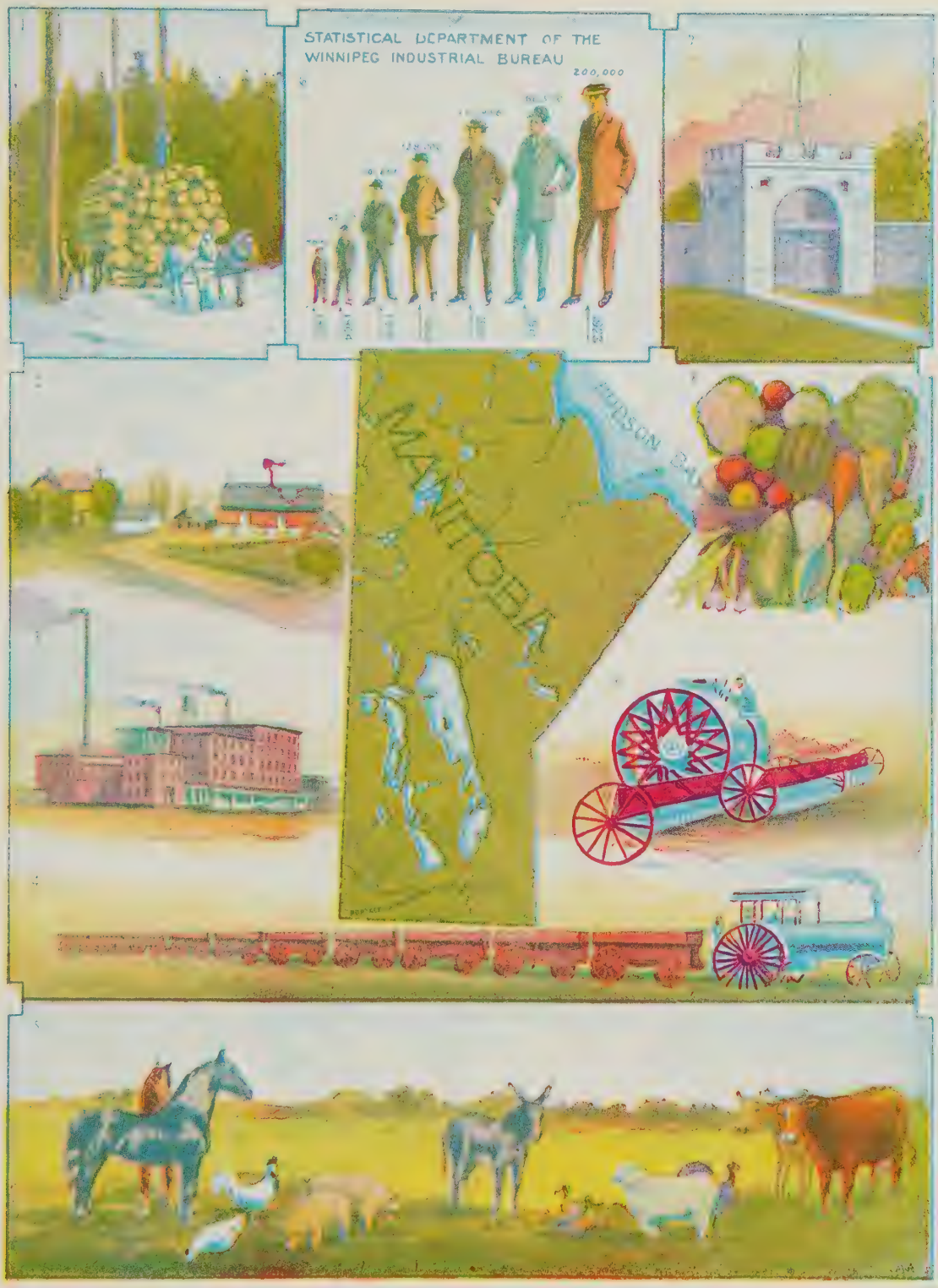
b. House of Commons; members elected by the people of the provinces according to population.

C. Judicial department.

a. Supreme court at Ottawa, with appellate, civil and criminal jurisdiction throughout the Dominion, and an exchequer court with power of admiralty.

The provinces have each a separate parliament and administration, with a lieutenant-governor, who is appointed by the governor-general, at the head of the executive. Each province has a general assembly, whose members are elected by the people in constituencies. Full power to regulate local affairs and dispose of their revenues is vested in the several provinces.

16. History: The valley of the Saint Lawrence was first occupied by the French. Canada was ceded to England by France at the close of the French and Indian War in 1763. Canada declined the invitation to join the Americans in the Revolution. Present Canadian Confederation was formed in 1867.



(Method Book Opp. 562)

MANITOBA.

1, Lumbering; 2, Farm home; 3 Flouring mills; 4, Train of wagons loaded with wheat being drawn to market; 5, Live stock and poultry; 6, Phenomenal growth of Winnipeg; 7, Gate of Fort Garry; 8, Vegetables; 9, Sowing grain.

Questions on the Dominion of Canada.

What can you say about the size and surface of Canada? 451.

Name the principal rivers and lakes of the Dominion. 452.

Has Canada grown rapidly the past decade in wealth and population? Why? 455, 458.

Describe the Saint Lawrence system of navigation, naming the principal Canadian ports of trade.

Name the provinces of the Dominion and locate their capitals.

What changes were made in the boundaries of Manitoba, Ontario and Quebec in 1912? 458.

Where are the principal fisheries of Canada? What kinds of fish are most abundant? 453.

Is Newfoundland a part of Canada? 451, 1937.

Write an essay on the government of Canada, describing its executive, legislative and judicial systems. 455.

Newfoundland.

1. Newfoundland and the eastern coast of Labrador form a British province separate from Canada.
2. The islands of Saint Pierre and Miquelon, south of Newfoundland, belong to France, and the French claim the right to land on certain parts of Newfoundland to cure fish, etc.
3. Chief occupations: Fishing. Cod-fisheries of Newfoundland most important in the world.
4. Products: Fish, canned lobster, iron, copper, coal, lead.
5. Exports: Cod-fish, lobster, cod-liver oil.
6. Capital: Saint John's, most important trade center.

Facts Regarding British America.

The Saint Lawrence is the most important navigable river of Canada.

Montreal is at the head of ocean and river navigation by large steamers. Between Montreal and Lake Ontario a number of canals surmount the rapids which occur in the river.

The country has splendid forests and exports immense quantities of lumber. The trade is largely with the United States and Great Britain.

Canada is well supplied with railroads. The Canadian Pacific and the Canadian National are the great trunk railway lines which connect the transportation of the east and the Great Lakes with the Pacific coast.

The estimated cost of the Welland Canal is $9,000,000. It is 15 feet deep, 160 feet wide, and 27 miles long.

The Victoria bridge across the Saint Lawrence at Montreal, an immense tubular structure, cost about $6,300,000. It is over a mile long.

Although nominally under Great Britain, Canada is practically independent in its government, which is highly efficient.

Hudson Bay and Davis Strait, either with the Nelson River or a railroad, will soon be utilized as a water-way for exporting grain and other products from the prairie provinces.

Quebec is regarded as the strongest fortress in the world, except Gibralter. The Bay of Fundy is remarkable for its tides, which rise to the height of 71 feet.

The wheat crop of Canada is steadily increasing with the larger and rapid development of the prairie provinces.

At the mouth of the Mackenzie River the summer day is about two months long.

The Saguenay is said to be the deepest river in the world, the depth near the mouth being 3,000 feet.

The latitude of Montreal is about the same as that of Venice in Italy.

Canada extends about 75 miles farther south than Maine. The longest growing season is in British Columbia, where cereals, fruits, and vegetables are produced with much profit.

Quebec is the largest province of the Dominion, Ungava having been made a part of it in 1912.

Danish America.

1. Composed of Greenland and Iceland, which belong to Denmark.
   - A. Greenland: Largest island in the world.
     - a. Population: 12,156; Eskimos, few whites along southwestern coast.
     - b. Severe weather; July is the only month without snow.
     - c. Exports: Oil of seals and whales, furs, eider-down, fish.
     - d. Towns: Godthaab; Upernivik—most northern town in the world.
   - B. Iceland: Largest island of Europe except Great Britain.
     - a. Many highlands in the north; numerous volcanoes, geysers, glaciers.
     - b. Climate is warmer than that of any other country of same latitude; average January temperature like that of New York City.
     - c. Inhabitants: Of Scandinavian origin; live along the coast.
     - d. Reikjavik is the only town of importance.

Questions on Danish America.

When and by whom was Greenland discovered? How is it separated from the continent of North America? 1199.

By what classes of people is it now inhabited? What is the present population?

What are the chief occupations and the leading products of Greenland?

Give the location of Iceland. How was it originally formed? 1358.

What is said of the literature of Iceland? What are the Sagas? 2484.

Tell how Greenland and Iceland are governed. Name their important cities.

United States.

1. Position: Latitude and longitude; comparison with other countries.
2. Boundaries: Natural; political.
3. Size and extent: Width, length, area. Compare with other countries.
4. Draw maps of United States to represent it politically, physically; density and distribution of population, rainfall, commercial routes, etc.
5. Climate: Coastal and gulf region; highlands; lowlands; average rainfall, temperature, need of irrigation, effects of winds, tides, currents, etc.
   - A. Northern part: Winters cold, temperature falling as low as 40° below zero; summers warm, often from 95° to 100° above zero.
   - B. Southern half: Winters very mild, there being little frost or snow; extreme south in the lowlands, frost and snow scarcely ever occur.
   - C. Coast of California has no winter; that of Oregon and Washington but little.
   - D. Mississippi Valley and eastern states usually have abundance of rain although occasional droughts occur.
   - E. Pacific highland and slope have but little rain and consequently depend largely upon irrigation.
   - F. Coast of California has rainy season instead of a winter, and no rain during the summer.

6. Surface.
   - A. Atlantic and Gulf Coastal Plain.
   - B. Appalachian Highlands.
   - C. Great Central Plain.
   - D. Rocky Mountain Highlands.
   - E. Great Basin.
   - F. Pacific Slope.

7. Mountains: Allegheny, Katahdin, Green, White, Washington, Adams, Jefferson, Adirondack, Marcy, Catskill, Blue, Cumberland, Mt. Mitchell, Smoky, Blue Ridge, Ozark, Rocky, Sierra Nevada, Coast Range, Baker, Saint Helens, Hood, Whitney, Hamilton, Wasatch, Big Horn, Black Hills, Pike's Peak, Spanish Peaks, Wind River, Laramie, Bitter Root, Alaskan Range, Saint Elias, Shasta.

MAP PRIOR TO THE WORLD WAR, SHOWING SIZE OF THE UNITED STATES.

8. Capes and Peninsulas: Cod, Ann, Henlopen, Charles, Sable, Saint Blas, Henry, Hatteras, Lookout, Fear, Canaveral, Mendocino, Blanco, Flattery, Prince of Wales, May, Sandy Hook, Cape Cod, Florida, Michigan, Delaware.
9. Islands: Mt. Desert, Nantucket, Martha's Vineyard, Long, Staten, Santa Barbara, Baranoff, Kodiak, Apostle, Aleutian, Saint Lawrence.
10. Gulfs and Bays: Cape Cod, New York, Delaware, Chesapeake, Appalachee, Tampa, Mexico, Mobile, Galveston, San Francisco, Bristol, Penobscot, Green, Saginaw, Passamaquoddy, Massachusetts, Buzzard's, Monterey, Casco.
11. Lakes: Great Lakes, Champlain, George, Moosehead, Chesuncook, Seneca, Cayuga, Chautauqua, Okechobee, Pontchartrain, Schoodic, Grand, Winnipiseogee, Umbagog, Sebago, Winnebago, Peoria, Itasca, Lake of the Woods, Okoboji, Yellowstone, Tulare, Pyramid, Klamath, Great Salt, Red, Humboldt, Memphremagog.
12. Rivers.
    - A. Saint Lawrence System: Saint Louis, Menominee, Saint Mary's, Grand, Saint Clair, Detroit, Muskegon, Maumee, Genesee, Oswego, Niagara, Saint Lawrence, Kalamazoo, Fox.
    - B. Atlantic System: Saint John, Saint Croix, Penobscot, Kennebec, Androscoggin, Merrimac, Connecticut, Housatonic, Hudson, Mohawk, Delaware, Susquehanna, Potomac, Shenandoah, Rappahannock, York, James, Roanoke, Neuse, Cape Fear, Great Pedee, Yadkin, Santee, Savannah, Ogeechee, Altamaha, Saint Mary's, Saint John's,

C. Gulf System: Mississippi, Missouri, Arkansas, Red, Ohio, Tennessee, Cumberland, Wabash, Kentucky, Scioto, Big Sandy, Great Kanawa, Allegheny, Monongahela, Miami, Kaskaskia, Illinois, Rock, Wisconsin, Chippewa, Saint Croix, Minnesota, Red Cedar, Iowa, Des Moines, Milk, Marias, Yellowstone, Little Missouri, James, Big Sioux, Niobrara, Elkhorn, Platte, Kansas, Osage, White, Saint Francis, Canadian, Washita, Yazoo, Pearl, Sabine, Trinity, Brazos, Colorado, Rio Grande, Pecos, Mobile, Alabama, Tombigbee, Appalachicola, Flint, Chattahoochee, Suwance.

D. Pacific System: Colorado, Gila, Grand, Green, Humboldt, San Joaquin, Sacramento, Salina, Klamath, Columbia, Snake, Salmon, Williamette, Clarke's, Merced.

13. Population, 1920, 105,683,108, of which 10,128,294 were Negroes.
    A. Immigration; emigration.
    B. Races and nationalities represented.
    C. Per cent. of annual increase.
    D. Density of population: rate of progress westward.
14. Religion: Protestant; Roman Catholic; Jewish; Mormon.
15. Cities: Washington, D. C., is the capital. The following fifty cities had a population of over 100,000 in 1920:

	1910	1920		1910	1920
New York, N. Y.	4,766,883	5,620,048	St. Paul, Minn.	214,744	234,595
Chicago, Ill.	2,185,283	2,701,705	Denver, Colo.	213,381	256,491
Philadelphia, Pa.	1,549,008	1,823,779	Portland, Ore.	207,214	258,288
St. Louis, Mo.	687,029	772,897	Columbus, O.	181,511	237,031
Boston, Mass.	670,585	748,060	Toledo, O.	168,497	243,109
Cleveland, O.	560,663	796,836	Atlanta, Ga.	154,839	200,616
Baltimore, Md.	558,485	733,826	Oakland, Cal.	150,174	216,361
Pittsburgh, Pa.	533,905	588,193	Worcester, Mass.	145,986	179,754
Detroit, Mich.	465,766	993,678	Syracuse, N. Y.	137,249	171,649
Buffalo, N. Y.	423,715	506,775	New Haven, Conn.	133,605	162,519
San Francisco, Cal.	416,912	506,676	Birmingham, Ala.	132,683	178,270
Milwaukee, Wis.	373,857	457,147	Memphis, Tenn.	131,105	162,351
Cincinnati, O.	363,591	401,247	Scranton, Pa.	129,867	137,700
Newark, N. J.	347,469	414,216	Richmond, Va.	127,628	171,667
New Orleans, La.	339,075	387,408	Paterson, N. J.	125,600	135,866
Washington, D. C.	331,069	437,408	Omaha, Neb.	124,096	191,601
Los Angeles, Cal.	319,198	576,673	Fall River, Mass.	119,295	120,485
Minneapolis, Minn.	301,408	380,582	Dayton, O.	116,577	152,559
Jersey City, N. J.	267,779	298,079	Grand Rapids, Mich.	112,571	137,634
Kansas City, Mo.	248,381	324,410	Nashville, Tenn.	110,364	118,342
Seattle, Wash.	237,194	315,652	Lowell, Mass.	106,294	112,759
Indianapolis, Ind.	233,650	314,194	Cambridge, Mass.	104,839	109,694
Providence, R. I.	224,326	237,506	Spokane, Wash.	104,402	104,437
Louisville, Ky.	223,928	234,891	Bridgeport, Conn.	102,054	143,152
Rochester, N. Y.	218,149	295,750	Albany, N. Y.	100,253	113,344

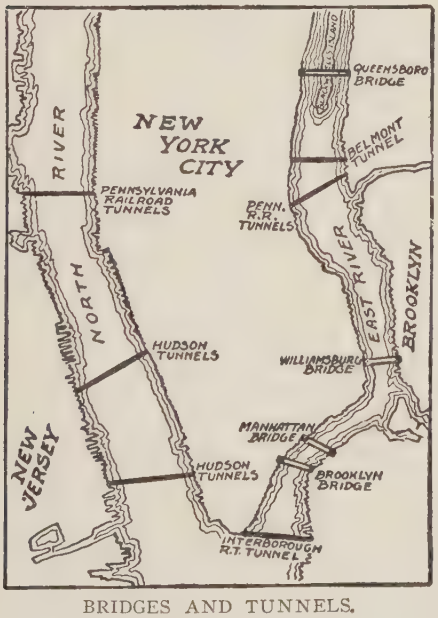
16. Occupations: Agriculture, manufacturing, mining, transportation, fishing, etc.
17. Products:
    A. Every food-producing vegetable, except those requiring the hottest climate, is grown.
    B. The most important cereal is corn, which is raised in every state.
    C. The next in importance are hay, wheat and cotton.
    D. Barley, oats, buckwheat, rye, flax, potatoes and tobacco are raised.
    E. Sugar is produced from cane in Louisiana and from beets in the western states. Maple sugar is produced in the New England states, Ohio, New York and Pennsylvania.
    F. California and Florida produce oranges, lemons, pineapples and other tropical fruits.
    G. The states bordering on the Gulf of Mexico are the cotton states, Texas ranking first and Mississippi second.
    H. Kentucky is the leading tobacco state with Virginia and the bordering states following.

I. Iowa and Illinois are the leading corn states, closely followed by others in the same latitude.
J. Minnesota and North Dakota lead in the production of wheat.
K. Potatoes are produced, every state contributing its share.

18. Government: Republic.
A. Executive department.
a. President elected by the people.
b. Heads of departments appointed by President, confirmed by senate.
c. Ministers to foreign countries are appointed by the President.
B. Legislative department.
a. Senate; composed of two senators from each state.
b. House of representatives; composed of members elected by the people of the several states according to population.
C. Judicial department.
a. United States judges who are appointed for life by the President.
The government of the states is similar to that of the United States, being vested in a governor, senate and house of representatives and state judges, all elected by the people.

Wonders of the United States.

Yellowstone National Park. This remarkable region is located mainly in the northwestern corner of Wyoming and is 54 by 62 miles in extent. It has been set apart by the United States government, under the control of the Secretary of the Interior, and is not subject to private ownership or settlement. It has about 100 geysers throwing hot water from 50 to 300 feet high. The average elevation is one and a half miles, while some of the peaks are over two miles high. The thermometer rarely if ever rises higher than 70° and it freezes every month in the year. The Yellowstone, Gallatan, Madison and Snake rivers rise within the Park. Yellowstone Lake is 22 miles long by 15 miles wide and 1½ miles above sea-level. The Yellowstone Lake surpasses all other regions of the world in the number and magnitude of its hot springs and geysers.



BRIDGES AND TUNNELS.

Subways or Tunnels. New York City has the most complete system of subways, extending not only the entire length of Manhattan, but penetrating under the Hudson to Jersey City and under the East River to Brooklyn. Electric trains are also operated in subways in Boston and a similar system is being installed in Chicago.

Washington Monument was commenced in 1848 and finished in 1884. It is 55 feet square at the base and 555 feet high. It is situated in the city of Washington, D. C.

Lick Observatory. A large observatory on Mount Hamilton, in California. It contains the largest telescope ever made with the exception of the one now at Yerkes Observatory, near Chicago, and enjoys unusual advantages on account of its elevated position.

Brooklyn Bridge. A suspension bridge across East River, between New York and Brooklyn. The entire length of the bridge is 5989 feet, or over a mile. Several other equally remarkable bridges span the East River.

Cleopatra's Needle, an Egyptian obelisk of granite, was first erected in Heliopolis, Egypt, 1100 B. C. It was brought to New York in 1880 and placed in Central Park.

The Panama Canal, which crosses the Isthmus of Panama and connects the Atlantic with the Pacific, is the largest engineering enterprise undertaken by the United States and by the world.

High Buildings: New York City has the highest buildings in the world. Of these the Woolworth is the most noted, having 51 stories and being 775 feet high. Other high buildings in New York City include the Metropolitan, 50 stories and 700 feet high; the Singer, 42 stories and 612 feet high; the Municipal, 24 stories and 560 feet high; and the Bankers' Trust, 39 stories and 539 feet high.

Yosemite Valley. A remarkably deep gorge in Mariposa County, California, the bottom being nearly a mile below the level of the surrounding country. It is about 150 miles southeast of San Francisco, 7 miles long and from one-half to a mile wide. Immense columns of rock rise almost perpendicularly from 2000 to 3000 feet and there are numerous waterfalls, one of which descends 2600 feet in three leaps. The Merced River rises in the Sierra Nevada mountains and flows through the valley, forming the Bridal Veil Falls and other beautiful falls. This river is utilized for irrigation purposes in its lower course. This valley has been set aside as a public park under the control of California.

BARTHOLDI'S STATUE OF LIBERTY.

The Big Trees of California are found near the Yosemite Valley, many of them in the same county, and others farther north. Many of them are from 275 to 376 feet high, and from 25 to 34 feet in diameter.

The Mammoth Cave is a large cavity in the ground near the Green River, in Kentucky. It extends 8 or 10 miles under ground and contains many chambers and passages, some of the former being 200 to 300 feet high.

Erie Canal, the largest and most important canal in the United States, extends from Albany to Buffalo, a distance of 363 miles. It is 70 feet wide at the top, 40 at the bottom and 7 feet deep. It crosses several large streams on stone aqueducts.

Hoosac Tunnel, northwestern Massachusetts, on a railroad between Boston and Troy, N. Y. It is a little over 4¾ miles long and large enough for two lines of railway trains.

Chicago Tunnel. Chicago is supplied with water brought through two tunnels from Lake Michigan. They extend under the bed of the lake a distance of several miles.

Bartholdi's Statue of Liberty. This statue is located on Bedloe's Island, in New York harbor. It is the highest statue in the world, being 306 feet above mean tide. It was presented to the United States by France in 1886 to commemorate the 100th anniversary of its independence, as a token of friendship between the two countries. 1582.

Liberty.

Written by Bernhart Paul Holst, after visiting New York Harbor on Aug. 14, 1905.

Hail to the woman with the torch of fire,
  Standing on Bedloe's Isle the world to guide!
Beacon to pilgrims of worthy sire,
  Guide to the homeless! Far and wide
Has thy mighty welcome blazed its way
  To all earth's tired as well as me,
And now I see the break of better day,
  The dawn of freedom and of liberty!

Unlike the brazen Rhodes of Grecian lore,
  With mighty limbs from land to land;
She stands upon the eastern sea-washed shore,
  The emblem of the free in heart and hand!
Her face is glad with Music of the Spheres,
  Her eyes as stars in glowing beauty shine,
She lights the path to peace in future years,
  She progress gives to me and all of mine!

Long centuries had pressed upon the poor,
  Had made them dead to joy and faith and fear;
They could not hope to see an open door,
  So pressed with pain, could scarcely shed a tear:
The Tragedy of Time caused head to bow,
  The Wheel of Labor made the back to bend;
Profaned and robbed, what could they do, and how?
  What shores to them would friendly welcome send?

The masters and the lords of royal blood
  With monstrous mandates crushed the living soul,
And ground man down with burdens and the flood
  Of wars. And, as the years and ages roll,
Refused to right the base perfidious wrongs
  That dwarf and stun the much-bewildered brain—
But, hark! I hear the welcome, new-born song
  And see the torch of liberty again!

Glides now the ship to anchor in the bay—
  Soon will I tread the shore of my adopted land
And breathe a purer spirit, blessèd day,
  As I step on the far-enchanted strand!
This heritage is nature's noblest gift
  To man, and to the multitudes that come,
As well as all who long have been adrift,
  And rest at last to make this land their home.

Hail to the woman with the torch of fire,
  Standing on Bedloe's Isle the world to guide!
Beacon to pilgrims of worthy sire,
  Guide to the homeless! Far and wide
Has thy mighty welcome blazed the way
  To all earth's tired as well as me,
And now I see the break of better day,
  The dawn of freedom and of liberty!

Dependencies of the United States.

1. Alaska: Bought of Russia in 1867.
   A. Area: 590,884 square miles, twice the size of Texas.
   B. Surface: Mountains; Mount McKinley; Mount Shasta.
   C. Drainage: Yukon River Valley is most important.
   D. Climate: Lies in path of westerly winds; equable along coast; plentiful rainfall; interior, colder and drier. Muir Glacier is the largest in the world.

E. Products: Gold, coal, fish, sealskins, furs.
F. Cities: Sitka, Juneau, Wrangell.

2. Hawaii: Belonged to United States since 1898 by annexation.
   A. Located about one-third of the way across the Pacific Ocean.
   B. Consists of twelve islands; combined area equal to size of Connecticut.
   C. Population of over 200,000.
   D. Surface: Mountainous and volcanic; Mauna Loa, Mauna Kea, Kilauea.
   E. Products: Sugar, rice, bananas, live stock.
   F. Capital: Honolulu, modern; good wharves; splendid trade.

3. Philippines: Possession of United States since 1898.
   A. Area: Include 3,141 islands; equal in size to Arizona.
   B. Population: Over 7,000,000, chiefly of the yellow race; over 30 dialects spoken.
   C. Climate and Vegetation: Tropical everywhere; rainfall abundant; dense vegetation.
   D. Products: Hemp, sugar, coffee, cocoanut, tobacco, indigo, rice, cabinet woods, dyes, gold, coal, copper, silver, lead.
   E. Cities and Trade: Manila, Iloilo; United States receives half of the exports, which are mainly hemp, sugar, tobacco and fruits.

4. Porto Rico: Ceded to United States in 1898 as a result of Spanish American War.
   A. Area: One of the largest of the West Indies; about 3½ times the size of Rhode Island.
   B. Population: Spanish descent and negroes; very dense—over a million.
   C. Surface and Climate: Diversified with mountains, coastal plains; warm; abundant rainfall.
   D. Products: Cabinet woods, sugar, tobacco, coffee, tropical fruits.
   E. Towns: San Juan, Ponce, Mayagues, Arecibo, San German.

5. Other Islands: Guam, Tutuila, Howland, Baker, Wake, Midway, Marcus.

Questions on the United States.

Compare the United States in size with Canada and Australia.

Illustrate by a map the transcontinental railroads of United States and Canada.

Why are Puget Sound and San Francisco Bay so important to the Pacific Coast? Why is Spokane, Washington, called the Minneapolis of the west?

Where are the largest meat and grain centers of United States? Name our twenty largest cities and tell something for which each is noted.

Contrast the methods of farming and the farm products of the Mississippi Valley with those of the western states.

When and for what purpose were the Philippine Islands purchased by the United States? Of what particular value are the Hawaiian Islands?

In imagination trace a ship load of grain from Chicago to Liverpool.

Which are the cotton and rice producing states? Where are iron, petroleum, coal, gold and silver produced most abundantly?

Name ten points of interest because of their scenic beauty. Name ten points noted historically.

What are the three great industries of Alaska? Is Alaska a paying possession of the United States?

Central America.

1. Divisions: Honduras, Guatemala, Salvador, Panama, Nicaragua, Costa Rica, Panama Canal Zone.
2. Location, boundaries, area.
3. Surface: Mountainous, except low, narrow plain along eastern coast.
4. Climate: Very similar to that of Mexico.
5. Products: Lumber, tobacco, corn, sugar, dyewoods, cacao, mahogany, coffee, minerals, fruits, India rubber, cocoanuts, grain, beans, potatoes.
6. Exports: Timber, bananas, cocoanuts, gold, silver, coffee, indigo, tobacco.

CENTRAL AMERICA.

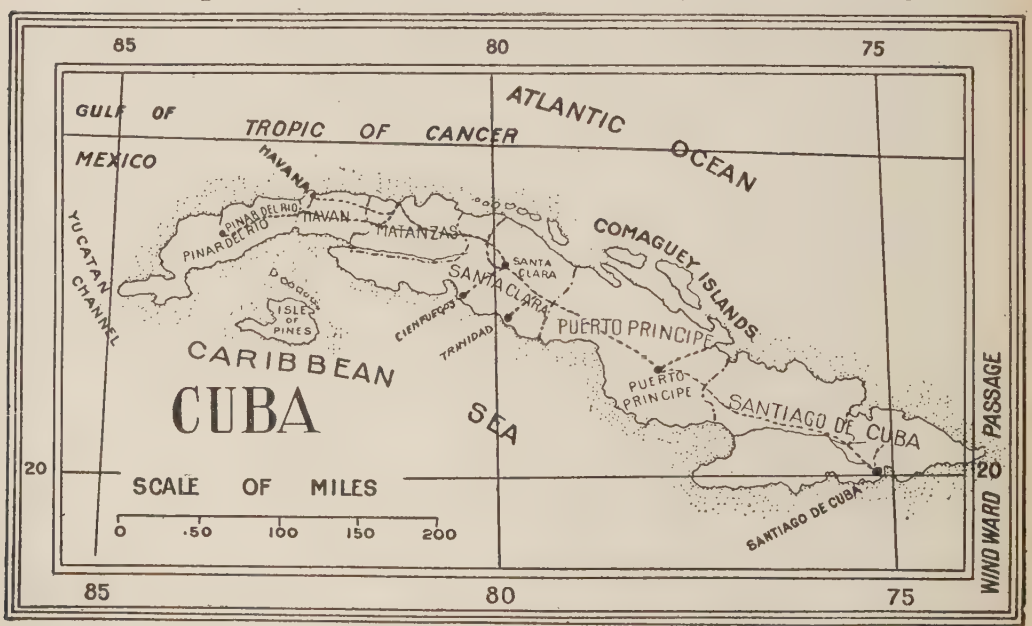
Mexico.

1. Location, boundaries, size.
2. Draw a map and locate mountains, rivers, lakes, Tropic of Cancer, etc. Paint a map of Mexico, indicating the chief products in their proper locality.
3. What and where are: Tehuantepec, Corrientes, San Lucas, Yucatan, Matamoras, Catoche, Campeche, Cozumel, Angel de la Guarda, Petén, Chapala.
4. Surface: Cordillera Highlands, Central Plateau, Coastal Plains. Mountains and Volcanoes: Sierra Madre, Orizaba, Popocatepetl, Ixtaccihuatl, Colima.
5. Drainage: Rio Grande, Rio Conchos, Rio Salado and Larma rivers; Lake Chapala.

6. Climate: Lies in the Hot Belt; temperature is greatly diversified, being somewhat cold in the highlands, equable inland and hot along the coast. Rainy season begins in May and continues until October.
7. Occupations: Agriculture, stock raising, mining, manufacturing, commerce.
8. Products: Cotton, coffee, cacao, vanilla, corn, beans, tobacco, dyestuffs, agaves, wool, sugar, gold, silver, copper, iron, coal, quicksilver, sulphur, building stone.
9. Exports: Silver, gold, coffee, woods, copper, hides, tobacco, fruits, vanilla.
   Imports: Coal, machinery, manufactured articles.
10. People: Spanish descendants, whites, Indians. Official language is Spanish. Principal religion, Roman Catholic. Government is republican in form.
11. History: Conquered by Cortez early in 16th century. Remained a Spanish dependency for 300 years, gaining independence in 1821; Revolutions.
12. Cities: Mexico—capital, Acapulco, Manzanillo, Mazatlan, Manzanillo, Tampico, Vera Cruz.

West Indies.

1. Names; number; area; countries or possessions.
2. Origin: Chiefly volcanic or of coral formation.
3. Surface: Rather rugged; some high mountain peaks.
4. Climate: Tropical; hot and unhealthful in the lowlands; moderate on the higher elevations; two seasons—wet and dry.
5. Products: Sugar, tobacco, rum, cotton, coffee, maize, yams, pineapples, citron, lemons, potatoes, oranges, manioes, indigo, aloes, pepper, sassafras, timber, gold, silver, coal, lead, copper, tin, manganese, limestone, granite.



Questions on Mexico and Central America.

How can we account for the diversity of climate in Mexico? What effect has this varied climate on the vegetation? 1773.

How does Mexico compare with other countries of the world in its mineral wealth? Name the most important of its mineral products.

What can you say of the manufactures and commerce of Mexico?

RELIEF MAP OF SOUTH AMERICA

Give a brief discussion of the history. What recent changes have occurred in its government?

What are the political divisions of Central America? Name the principal cities. 521.

How will ocean trade routes be shortened by the Panama Canal?

What are the exports of Central America?

South America.

1. Position; size—extent, area, comparative.
2. Outline: Regular or irregular. Make a list of the projections and indentations.
3. Make a map showing the various political divisions and learn to spell them. Mold a physical map with clay.
4. Surface: Cordillera, Brazilian and Guiana Highlands, Plateaus of Bolivia and Patagonia, llanos, pampas, and selvas.
5. Drainage: Amazon, Orinoco, Parana, Paraguay, São Francisco, and Magdalena rivers. Lakes: Titicaca and Maracaibo.
6. Climate: Located in torrid and south temperate zones; two seasons—wet and dry; lofty highlands and extreme southern part are the colder sections; enormous rainfall on northeastern Atlantic slope and valley of the Amazon; dry belt along the coast of Peru and Chile.
7. Cities: Name the capital of each country. Locate the following: Bahia, Pernambuco, Rosario, Valparaiso, Iquique, Paunta Arenas, La Paz, Valencia.
8. Products: Coffee, rubber, sugar, tobacco, cacoa, cotton, dyewoods, hides, dyewoods, diamonds, wool, mutton, wheat, medicinal plants, gold, silver, guano, nitre, mercury, borax, beans.
9. Exports: Coffee, cotton, silk, borax, silver, lumber, hides, tobacco, medicinal plants, mutton, beef, wool.
10. Population: Smallest of any continent except Australia; Indians, Spaniards, Portuguese, Italians, Germans.
11. History: Discovered by Columbus. Explored and developed by Spaniards and Portuguese. Simon Bolivar was the greatest leader. All the countries are republics, except Guiana, which belongs to England, France and the Netherlands.

Questions on South America.

Name the two largest countries of South America. For whom was Bolivia named? 136, 327.

What is the general form of this continent? Describe its three greatest river systems.

What and where are the llanos, pampas and selvas? Briefly describe the animals which inhabit South America.

Which countries are republics? Which countries are controlled by European powers? 2685.

What are the chief products and exports of Brazil? 361.

Who were the Incas? What can you tell of the people of Peru? 1371, 2169.

What is the prevailing religion of South American countries? What language is most generally spoken?

Describe the surface and drainage of Chile. Name its chief cities and tell something for which each is noted. 559.

Name and locate the principal seaports of South America. Describe the city of Buenos Ayres. 397.

Europe

1. Position; boundaries; outline; size; importance.

2. Surface.
   A. Plain or Plateau: Great Lowland, Wallachian, Bohemia, Lombardy, France.
   B. Mountains: Ural, Balkan, Carpathians, Alps, Apennines, Pyrenees, Cantabrian, Kjolen, Sierra Morena, Cévennes, Etna, Blanc, Vesuvius.

3. Drainage.
   A. Rivers: Pechora, Dwina, Ural, Volga, Don, Dnieper, Dniester, Danube, Po, Rhone, Guadalquiver, Guadiana, Tagus, Douro, Loire, Seine, Rhine, Elbe, Oder, Vistula, Duna, Thames, Clyde, Shannon, Tiber, Theiss, Garonne, Weser, Aar, Humber, Trent.
   B. Lakes: Onega, Ladoga, Wener, Wetter, Geneva, Constance, Maggiore, Como, Lomond, Erne.

4. Seas, Gulfs, Bays: Kara, Caspian, Black, Aegean, Adriatic, Mediterranean, Biscay, Irish, North, Baltic, Finland, Bothnia, Azov, Marmora, White, Lion, Genoa, Riga, Ionian, Venice, Taranto, Salonica, Archipelago.

5. Straits and Channels: Kattegat, Skager Rak, Dover, English, Gibralter, Messina, Dardanelles, Bosporus, Saint George's, North, The Minch, Little Minch, Great Belt, Little Belt, Otranto, Bonifacio, Enikale.

6. Capes and Peninsulas: Land's End, Finisterre, Saint Vincent, Matapan, Clear, Wrath, Duncansby Head, North, Iberian, Scandinavian, Italian, Crimean, Morea, Jutland.

7. Islands: Great Britain, Ireland, Iceland, Hebrides, Orkney, Shetland, Lofoden, Zealand, Fünen, Gothland, Balearic, Corsica, Sardinia, Sicily, Candia, Cyprus, Malta, Ionian, Elba, Majorca, Oesel, Nova Zembla.

8. Cities: Capital cities and Liverpool, Birmingham, Manchester, Leeds, Bristol, Sheffield, Salford, Hull, Newcastle, Glasgow, Dundee, Aberdeen, Belfast, Cork, Limerick, Waterford, Londonderry, Lyons, Marseilles, Bordeaux, Lille, Toulouse, Havre, Dover, Geneva, Basel, Zurich, Lucerne, Naples, Milan, Turin, Palermo, Genoa, Florence, Venice, Bologna, Hamburg, Breslau, Munich, Dresden, Leipsic, Cologne, Hanover, Amsterdam, Rotterdam, Utrecht, Odense, Buda-Pesth, Prague, Trieste, Saint Petersburg, Warsaw, Odessa, Riga, Kishinev, Cracow, Barcelona, Valencia, Seville, Malaga, Antwerp, Ghent, Liege, Salonica, Adrianople, Varna, Sophia, Jassy, Hermopolis, Oporto, Gottenburg.

9. Climate: Moderate and very agreeable in the west, owing to warm ocean currents; colder in north and east; warm in south.

10. Occupations: Manufacturing, commerce, mining, quarrying, farming, stock raising, dairying, fishing, lumbering, fruit growing.

11. Products: Grapes, wine, silk, olive oil, cork, petroleum, amber, sponges, coal, iron, rice, grain, tropical fruits, lumber, pottery.

12. People and Religions: Most densely and completely inhabited continent, but divided among many nations. People are mostly of the white race and the remainder of the yellow race. Christian religion prevails, though Jews and Mohammedans are numerous. Educational uplift in all the countries is marked.

13. History. Settled by people from Asia. Seventeen republics and remainder are constitutional monarchies.

Questions on Europe.

Name and locate the capes, bays and peninsulas of Europe. 948.

Of what is Great Britain composed? Name ten important cities of the British Isles. 1186.

State the form of government of each of the European countries. Which country ranks highest educationally? 1127.

How is Russia progressing along commercial lines? Name the exports. 2466.

Describe the city of Paris. Tell about the defense of the country of France. 2105, 1047.

What are the Scandinavian countries? Briefly describe the people and industries of the Netherlands. 2545, 1925.

Which countries form the Iberian Peninsula? Describe their surface, industries and products. 2694, 2885.

Describe the government of France. Name the colonial possessions of France. 1046, 1047.

Describe the literature of Denmark. What is the capital? 783.

How does Belgium rank in its railroad mileage? Name the manufactures. Describe Antwerp and Brussels. 265, 115, 389.

Which is the smallest country of Europe? What can you tell of the early history and literature of Greece? 1194, 1836.

Describe the climate and products of Italy. Name its chief cities, giving important facts about each. 1419.

Asia.

1. Location; size; outline.
2. Population: More than five-sixths of entire population are found in China and India and the monsoon countries. Three-fourths of the people belong to the yellow race, remainder to the white race, Malays, etc. More than half of the human race live in Asia. Mohammedanism, Brahmanism, Buddhism, and Confucianism are numerically strongest, but the Christian and Jewish religions are well established.
3. Draw a map of Asia, locating the various countries with their chief rivers, mountains, lakes, and chief cities. Mold a physical map of this continent. Paint and draw a product map of Asia.
4. Surface: Northern, southern and central sections.
   - A. Plateaus and Plains: Tibet, Iran, Deccan, Table-land of Asia Minor, Armenian and Kurdistan Highlands, Plains of West Turkistan, Kobdo, Mongolian, Great Iberian, Pamir.
   - B. Mountains: Stanovoi, Yablonovoi, Khingan, Tian Shan, Himalayas, Hindu Kush, Elburz, Caucasus, Altai, Kuenlun, Ararat, Ural, Everest, Sinai, Eastern and Western Ghats.
   - C. Rivers: Ob, Yenisei, Lena, Amur, Hoangho, Yangtsekiang, Mekong, Salwin, Ganges, Indus, Tiger, Euphrates, Syr Daria, Godavery Brahmaputra, Cambodia, Irrawaddy, Angara, Sihon, Amu, Canton, Shat-el-Arab.
   - D. Lakes: Baikal, Aral, Balkash, Urumia, Poyang.
5. Capes and Peninsulas: Kamchatka, Korea, Malay, Cambodia, Comorin, India, Arabia, Rumania, Deshnef, Chelyuskin, East, North, Yalmal, Dondra Head.
6. Islands: Ceylon, Formosa, Andaman, Sumatra, Borneo, Java, Celebes, New Guinea, Philippine, Formosa, Mindanao, Luzon, Molucca or Spice, Hainan, Hondo, Yezo, Kiushiu, Sakhalin, Nova Zembla, Flores, Timor, Cyprus.
7. Seas, Gulfs and Bays: Behring, Okhotsk, Japan, Yellow, East China, South China, Siam, Bengal, Arabian, Persian, Aden, Red, Mediterranean, Black, Caspian, Martaban, Pechili, Manar, Cambay, Oman, Kamar, Ob, Tongking.

RELIEF MAP OF ASIA.

8. Straits and Sounds: Bab-el-Mandeb, Malacca, Formosa, Korea, Tartary, La Perouse, Behring, Ormus, Palk, Sunda, Macassar, Hainan.
9. Cities: Kabul, Tokyo, Mecca, Maskat, Aden, Medina, Yokohama, Peking, Canton, Tientsin, Hang Chow, Foo Chow, Shanghai, Calcutta, Bombay, Madras, Delhi, Benares, Cawnpore, Bangkok, Saigon, Mandalay, Singapore, Hue, Tiflis, Samarkand, Irkootsk, Omsk, Tobolosk, Teheran, Tabris, Meshed, Ispahan, Smyrna, Damascus, Aleppo, Bagdad, Jerusalem, Beyrout.
10. Climate: Owing to its great extent, Asia has the most strongly marked continental climate in the world. Northern Siberia contains the coldest region in the world. It is very hot in the south. Two seasons, hot and dry, occur. Extreme elevations, trade winds, adjacent bodies of water, etc., have their effects on the various countries.
11. Occupations: Hunting, fishing, trapping, lumbering, farming, stock-raising, silk industry, fruit-growing, manufacturing, commerce, quarrying.
12. Products: Fish, furs, grains, rice, dates, coffee, banyan, mahogany, gum, opium, sugar-cane, cotton, tobacco, spices, pepper, yam, tropical fruits, tea.
13. Countries: China, a republic, includes Manchuria, Mongolia, Turkistan and Thibet. The country is mountainous, except a great plain between the Yangtsekiang and Hoang-ho Rivers. The great wall is over a thousand miles long. Tea is the most important vegetable production. Rice and fish constitute the bulk of the food of the Chinese. The chief imports are opium, cotton goods, metals, woolen goods and coal. The exports are tea, silk and sugar. The greater part of the Chinese are Buddhists.

    British India includes Hindustan, Burmah, Ceylon, Aden, Baluchistan, and Sokotra. Agriculture is in a very backward state, although it is the principal occupation. Rice, cotton, wheat, opium, etc., are the chief products. Raw materials are exported and manufactured goods are imported. The inhabitants are principally Hindus, belonging to the Caucasian race, and Brahmanism is the prevailing religion, but there are many Buddhists and some Mohammedans.

    Afghanistan, Arabia, Persia, and Siam are independent. Anam and Cambodia are under the control of France. Siberia, including all the territory north of Afghanistan and west of China, belongs to Russia. The Straits Settlements and Aden belong to Great Britain, and the west coast of Arabia, including Yemen, belongs to Turkey. Corea belongs to Japan, which is an empire.

    The Philippines are a possession of the United States; the Carolines belong to Japan, and most of the East Indies belong to the Netherlands.

Questions on Asia.

What can you say of the population of Asia as compared with that of other continents? Which countries of Asia have the largest population and what races do they represent?

Name and locate the mountain ranges of Asia. Where are the plateau sections? 164.

Locate the Trans-Siberian Railway and indicate the chief stations along the road. 2368.

Contrast the farming of India with that of the United States. What are the principal products of India? 1375.

Describe the present form of government in China. Briefly discuss the educational situation. 566.

How do you account for the present progress in Japan? What are the chief exports? 1439.

Make a list of the gulfs, bays and seas of Asia. What are the most important peninsulas?

State some historical connection regarding the following: Jordan, Damascus, Mecca, Manila, Hankow, Port Arthur, Korea, Bagdad and Ceylon.

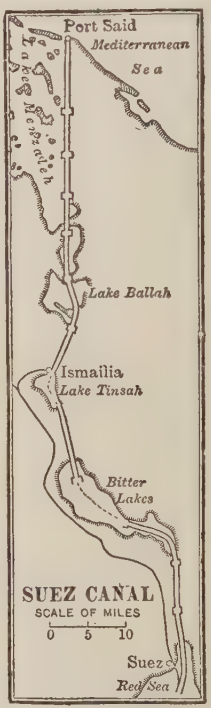
Describe the Himalaya mountains and tell which rivers are fed by the streams therefrom.

What are the chief industries of the Persians? For what are they especially noted? 2164.

What religions predominate in Asia? Briefly discuss the domestic life of the Arabians. 124.

Africa.

1. Location and boundaries.
2. Form, size and area.
3. Study the outline and make a free-hand cutting of Africa. Study the physical features, then mold Africa in sand or clay. Draw a map of the continent, showing the political divisions and cities.
4. Surface.
   - A. Mountains: Kilimanjaro, Kenia, Drakensburg, Snow, Mocambe, Crystal, Kameruns, Kong, Atlas, Ruwenzori.
   - B. Plateaus and Deserts: Algerian, Libyan, Nubian, Great Central, Kalahari, Sahara.
   - C. Rivers: Nile, Niger, Zambezi, Limpopo, Orange, Congo, Senegal, Tana, Juba.
   - D. Lakes: Chad, Victoria Nyanza, Nyassa, Albert Edward Nyanza, Tanganyika, Bangweolo.
5. Capes: Guardafui, Agulhas, Good Hope, Verde, Blanco, Spartel, Bon, Delgado, Frio, Corrientes, Amber, Sainte Marie.
6. Islands: Comoro, Madagascar, Annobon, Saint Thomas, Fernando Po, Cape Verde, Canary, Madeira, Azores, Mauritius, Réunion, Amirante, Seychelles, Saint Helena, Ascension, Princes, Sokotra.
7. Gulfs, Bays and Seas: Aden, Delagoa, Walfisch, Mediterranean, Red, Guinea, Gabes, Sidra.
8. Straits and Channels: Bab-el-Mandeb, Mozambique, Gibralter.
9. Cities: Alexandria, Khartum, Kairwan, Gondar, Damietta, Massush, Oran, Port Louis, Constantine, Tamative, Durban, Suez, Port Said, Cape Town, Johannesburg.
10. Climate: Africa, being in the hot belt, the climate is everywhere tropical, except in the extreme south. Various portions of the continent have a moderate climate on account of the trade winds and goldrums. Rainfall is extremely small except in the equatorial regions. Sahara Desert region is noted for its extreme heat.
11. People: Native people north of the Sahara belong to the white race. Europeans live along the coast and in some of the colonies. The blacks or Negro races abound in Africa. Religiously the people are classed as heathen, pagan, Mohammedan and Christian. Africa occupies third place among the grand divisions in population.
12. Countries and possessions.



The Suez Canal, 98 miles long, as compared with the Cape of Good Hope route, shortened the distance from Southampton to Bombay by 4,800 nautical miles. The canal stimulated the trade of all Mediterranean ports, and diverted shipping from Cape Town, formerly a coaling station on the sea route to India.

Questions on Africa.

What is the population of Africa and what is its rank among the other continents? What is said of the social conditions of this continent? 32.

RELIEF MAP OF AFRICA.

Name the independent countries of Africa. To whom do the other countries belong? Which European power possesses the largest scope of African territory? 33.

Describe the drainage of Africa. Which lake is passed through by the equator?

Give an interesting description of Egypt and the famous Nile system. 881, 1976.

Locate the capes of Africa. What large gulf is on the west coast?

Name the islands and island groups off the coast of Africa. How is Madagascar separated from the continent?

Name three large deserts of Africa. How is traffic carried on across them? 881, 1485, 2487. How is the great Assuan Dam useful to the Egyptians? 745.

Give a list of the animals of Africa. Which are most useful? Of what special value is the ostrich to these people?

What can you say of the transportation facilities of Africa? Describe the Cape-to-Cairo Railway. 472.

When and why was the republic of Liberia formed? Describe its government. 1581.

What can you say of the industries of Cape Colony? How do its diamond fields rank in the world? 468.

David Livingstone explored which portions of Africa? 1610.

Name the chief products of Sudan and of Nigeria. 2767, 1975.

Australia.

1. Location, boundaries, outline.
2. Size: Extent, area, comparative size.
3. Population: Natives belong to the lowest type of the Black race and are fast dying out. Large per cent. of the people are foreign, especially European. The English are largely responsible for the development of the continent.
4. Draw a map to show the political divisions, capitals and chief cities. Mold a relief map of Australia, showing the lowlands, highlands, divides, river systems, lakes, deserts, etc. Draw and paint a product map.
5. Surface: Interior is formed largely of sandy hillocks or plains. Australian Alps trend along the eastern coast. Highest peak is Mount Kosciusko. Low plains lie along the southern and northern coasts.
6. Drainage: Murray and Darling and the tributaries are the most important river system. Other rivers are the Victoria, Murchison and Cooper. Chief lakes are Amadeus, Eyre, Gairdner, Torrens and Austin.
7. Climate: Inland it is hot and dry, but the coasts are modified by healthful and pleasant sea breezes and rains. Eastern and southern slopes receive much moisture. Climate of the interior is characterized by great changes owing to excessively hot winds. Australia is crossed by the Tropic of Capricorn and is located in both the Torrid and South Temperate Zones.
8. Productions: Wool, live stock, cereals, tropical fruits, sugar-cane, tree ferns, canes, bamboo, palms, paper-bark, gum, tobacco, gold, silver, coal, tin, iron, pearls.
9. Government: Commonwealth of Australia consists of Victoria, Queensland, New South Wales, South Australia, Western Australia, and Tasmania. Governor general is appointed by sovereign of Great Britain and is assisted by ministry of Parliament. Bombala was made the capital in 1903.
10. Cities: Brisbane, Adelaide, Sydney, Melbourne, Hobart, Perth.

RELIEF MAP OF AUSTRALIA.

Islands of the Pacific.

1. New Zealand: Consists of two islands. Surface is quite mountainous and has numerous hot springs and geysers. It is swept by warm, strong winds and has good rainfall. Raising of horses, cattle and sheep and mining of gold and coal are important industries. Exports consist of stock, butter, frozen mutton and wool. Auckland is a noted coaling station and Wellington is the capital.
2. Java: Principal island of the Dutch East Indies, a possession of the Netherlands. Chief exports are tea, coffee, sugar, cinchona, tobacco, pepper, indigo, horses, buffaloes and cattle.
3. Borneo: One of the largest islands of the world. It belongs to Holland and Great Britain. Productions are sago, rice, tobacco, pepper, gambier, coffee, cotton and tropical fruits. Forests abound.
4. Sumatra: One of the most productive island possessions of Holland. Mountainous surface, plentiful rainfall, abundant vegetation and extensive mineral wealth. Natives chiefly Malays. They are active, tall, intelligent, and quite industrious. Exports are numerous.
5. New Guinea: Possession of Germany, England and Holland. Largest island in Australasia. Principal products include lumber, sweet potatoes, rice, tobacco, sugar, yams, rum, maize, wheat, millet, sago, cocoa, and tropical fruits.
6. Polynesia: Archipelagoes of the Hawaiian Islands, Society, Cook, Marquesas, Tokelau, Phoenix, Tonga, or Friendly, Ellice, Fiji, Navigator's, and Tuamotu islands.
7. Micronesia: Principal archipelagoes include the Carolines, Ladrones, Marshall, Radack, Pelew, Gilbert, and Brown islands.
8. Melanesia: New Guinea, New Pommern, and the groups of Solomon, Loyalty, Huon, Chesterfield, New Caledonia, New Hebrides, Santa Cruz, Admiralty, Norfolk and Louisiade islands.

Questions on Australasia.

Of what is Australasia comprised? Into what divisions is the Commonwealth of Australia divided? 188, 191.

Describe the surface and drainage of Australia. What is said of the vegetation and minerals?

To whom does the Commonwealth of Australia belong? How is it governed?

Locate on a map the points connected by the Transcontinental Railway of Australia. What is the capital?

Which portions of Australia are most populous and why?

Describe a trip from New York City to Melbourne, Australia, naming the waters through which you would pass.

When and by whom was Tasmania discovered? What are its leading exports? 2822.

What is the leading industry of New Zealand? What is said of the progress of the people in social, civil and educational affairs? 1965.

What are the divisions of New Guinea and to whom do they belong? What are the products? 1940.

Locate New Caledonia and tell about its inhabitants. 1936.

Locate the Solomon Islands, New Hebrides, New Britain, New Ireland, Admiralty Islands, and the Arru Islands, and tell to whom each belongs.

Search the Scriptures

CHRONOLOGICAL TABLE
of the
HOLY BIBLE.

For Use in the Home, the Church, and the Sunday School.

SINCE science is the handmaid of religion, each being helpful and essential in the development of the highest degree of civilization, the most studious attention is called to the BIBLE CHRONOLOGY which follows. The dates are those of Augustine Calmet (1672-1757), the Benedictine monk of France, and William Hales (1778-1821), the eminent divine and author of "The New Analysis of Chronology."

Students will find the subjects treated in this set the most helpful work of general reference in the study of biblical themes and the lives of men and women associated with the bible and its times. The leading characters are described; the important events are explained and made interesting; the beautiful stories of the prophets and the saints are set forth in an interesting manner. Consult the hundreds of articles, which include the following

Representative Topics.

Absalom.
Acts of the Apostles.
Alexandrian Version.
Antioch.
Apocrypha.
Apostles.
Baptism.
Benjamin.
Bethlehem.
Bible.
Canaan.
Damascus.
David.
Deluge.
Eden.
Festivals.

Representative Topics—(Continued)

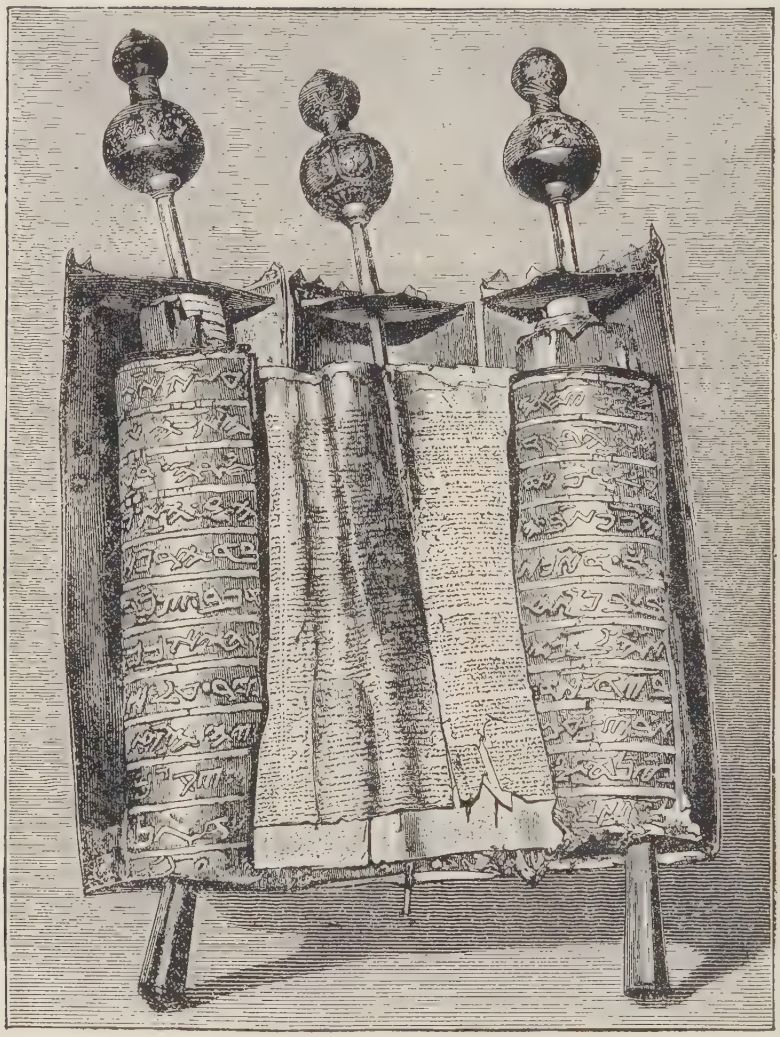
God.
Gospel.
Hell.
Isaac.
Jacob.
Jerusalem.
Jesus Christ.
Jews.
Mary.
Moses.
Naphtali.
Nineveh.
Noah.
Palestine.
Paul.
Pharasees.
Prophets.
Revelation, Book of
Sabbath.
Sadduces.
Sanhedrim.
Sinai.
Sodom.
Solomon.
Temple.
Timothy.
Urim and Thummim.
Zechariah.
Zion.

Year of the World.		Year before Christ.		FROM THE CREATION TO THE BIRTH OF CHRIST.	
Cal-met.	Hales.	Cal-met.	Hales.		
1	1	4000	5411	THE CREATION.	
				First day.—Creation of Light	Gen. i. 1—5.
				Second day.——the Firmament	—— — 6—8.
				Third day.—Sea, Water, Plants, Trees	—— — 9—13.
				Fourth day.—Sun, Moon, and Stars	—— — 14—19.
				Fifth day.—Fishes, and Birds	—— — 20—23.
				Sixth day.—Land Animals, and Man	—— — 24—31; ii. 7.
				God causes the animals to appear before Adam, who gives them names. God creates the woman by taking her out of the side of the man, and gives her to him for a wife. He brings them into Paradise	—— ii. 8—25.
				Seventh day.—God rests from the work of Creation, and sanctifies the repose of the Sabbath	—— — 2, 3.
				Eve, tempted fatally, by means of the serpent, disobeys God, and persuades her husband, Adam, to disobedience also. God expels them from Paradise.	—— iii.
2	100	3999	5311	Cain born, son of Adam and Eve	—— iv. 1.
3	101	3998	5310	Abel born, son of Adam and Eve	—— — 2.
129	201	3871	5210	Cain kills his brother Abel	—— — 8.
130	230	3870	5181	Seth born, son of Adam and Eve	—— — 25.
235	435	3765	4976	Enos born, son of Seth	—— v. 6.
325	625	3675	4786	Cainan born, son of Enos	—— — 9.
395	795	3605	4616	Mahalaleel born, son of Cainan	—— — 12.
460	960	3540	4451	Jared born, son of Mahalaleel	—— — 15.
622	1122	3378	4289	Enoch born, son of Jared	—— — 18.
687	1287	3313	4124	Methuselah born, son of Enoch	—— — 21.
874	1474	3126	3937	Lamech born, son of Methuselah	—— — 25.
930	930	3070	4481	Adam dies, aged 930 years	—— — 5.
987	1487	3013	3914	Enoch translated, had lived 365 years	—— — 24.
1042	1142	2958	4269	Seth dies, aged 912 years	—— — 8.
1056	1656	2944	3755	Noah born, son of Lamech	—— — 29.
1140	1340	2860	4071	Enos dies, aged 905 years	—— — 11.
1235	1534	2765	3877	Cainan dies, aged 910 years	—— — 14.
1290	1690	2710	3721	Mahalaleel dies, aged 895 years	—— — 17.
1422	1922	2578	3489	Jared dies, aged 962 years	—— — 20.

Year of the World. Cal-met.	Year of the World. Hales.	Year before Christ. Cal-met.	Year before Christ. Hales.		
1536	2136	2460	3275	God informs Noah of the future deluge, and commissions him to preach repentance, 120 years before the deluge	Gen. vi. 13—22; Heb. xi. 7; 1 Pet. iii. 20; 2 Pet. ii. 5.
1556		2444		Japhet born, eldest son of Noah	—— v. 32; x. 21.
1558	2256	2442	3155	Shem born, the second son of Noah	—— — 32.
1651		2349		Lamech dies, the father of Noah, aged 777 years	—— — 31.
1656	2256	2344	3155	Methuselah dies, the oldest of men, aged 969 years, in the year of the deluge	—— — 27.
				The tenth day of the second month (November) God commands Noah to prepare to enter the ark	—— vii. 1—4.
				Seventeenth day of the same month, Noah enters the ark with his wife, his sons, and their wives	—— — 7—9.
				Rain on the earth, forty days. The waters continue on the earth 150 days	—— — 10—24.
				Seventeenth day of the seventh month, the ark rests on the mountain of Ararat	—— viii. 4.
				First day of the tenth month, the tops of the mountains begin to appear	—— — 5.
				Forty days afterwards, Noah sends forth a raven	—— — 6, 7.
				Seven days afterwards, Noah sends out the dove; it returns	—— — 8, 9.
				Seven days afterwards, he sends it out again; it returns in the evening, bringing an olive-branch in its bill	—— — 10, 11.
				Seven days afterwards, he sends it forth again; it returns no more	—— — 12.
1657	2257	2343	3154	Noah being now 601 years old, the first day of the first month he takes off the roof of the ark	—— — 13.
				Twenty-seventh day of the second month Noah quits the ark. He offers sacrifices of thanksgiving. God permits to man the use of flesh as food; and appoints the rainbow, as a pledge that he would send no more a universal deluge	—— — 15—19. —— — 20—22. —— ix. 1—17.
1658	2258	2342	3153	Arphaxad born, son of Shem	—— ix. 10, 11
1663	2263	2337	3148	About seven years after the deluge, Noah, having planted a vineyard, drank of the wine to excess; falling asleep, he was uncovered in his tent. His son Ham, mocking at him, is cursed for it	—— ix. 20—27.
1693	2293	2307	3018	Salah born, son of Arphaxad	—— xi. 12.
1723	2523	2277	2888	Heber born, son of Salah	—— — 14.
1757	2657	2243	2754	Phaleg born, son of Heber	—— — 16.
1770	2857	2230	2554	About this time the building of the tower of Babel is undertaken; God confounds the language of men, and disperses them	—— — 1—9.
1771	2857	2229	2554	About this time the beginning of the Assyrian monarchy, by Nimrod. From this year to the taking of Babylon by Alexander the Great, are 1903 years, the period to which Callisthenes traced the astronomical calculations of the Chaldeans	—— x. 8—18. Porphyr. ap. Simplic. lib. ii. de Cœlo.
				The Egyptian empire begins about the same time, by Ham, the father of Mizraim: this empire continued 1633 years, till the conquest of Egypt by Cambyses	Ps. cvi. 22; Is. xix. 11. Constantin. Manass. in Annalib.
1787	2784	2213	2624	Reu born, son of Phaleg	Gen. xi. 18.
	2794		2614	Divisions of the Earth	—— x. 25.
1819	2919	2181	2482	Serug born, son of Reu	—— xi. 20.
1849	3049	2151	2362	Nahor born, son Serug	—— — 22.
1878	3289	2122	2283	Terah born, son of Nahor	—— — 24.
1948	3198	2052	2213	Haran born, son of Terah	
2006	2606	1994	2805	Noah dies, aged 950 years	—— ix. 29.
2008	3258	1992	2153	Abram born, son of Terah	—— xi.27;Josh.xxiv.2.
2018	3268	1982	2143	Sarai born, afterwards wife of Abram	—— — 29,30; xvii.17.
2083	3318	1917	2093	Abram called, in Ur of the Chaldees. He travels to Charré, or Haran, of Mesopotamia. His father, Terah, dies there, aged 205 years	Acts vii. 2, 3. Gen. xi. 31, 32.
2083	3333	1917	2078	Second calling of Abram from Haran. He comes	

Year of the World. Cal-met.	Year of the World. Hales.	Year before Christ. Cal-met.	Year before Christ. Hales.		
				into Canaan with Sarai his wife, and Lot his nephew; and dwells at Sichem	Gen. xii. 1—6; Acts vii. 4, 5; Heb. xi. 8.
2084	3343	1916	2077	Abram goes into Egypt; Pharaoh takes his wife, but soon restores her again. Abram quits Egypt; he and Lot separate	—— xii. 9—xiii. 11.
2091		1909		The kings of Sodom and Gomorrha revolt from Chedorlaomer	—— xiv. 1—4.
2092	3341	1908	2070	Chedorlaomer and his allies invade the kings of Sodom and Gomorrha, &c. Sodom is pillaged; Lot is taken captive; Abram pursues them, disperses them, retakes the booty, and recues Lot	—— xiv. 5—16.
				Melchizedec blesses Abram	—— —— 18—20; Heb. vii. 1—11.
	3342		2069	The Lord makes a covenant with Abram, and promises him a numerous posterity	—— xv.; Acts vii, 6; Gal. iii. 17.
2093	3343	1907	2068	Sarai gives her maid Hagar, for a wife, to her husband Abram	—— xvi. 1—3.
2094	3344	1906	2067	Ishmael born, the son of Abram and Hagar. Abram was 86 years old	—— —— 15, 16.
2107		1893		The new covenant of the Lord with Abram; God promises him a numerous posterity; changes his name from Abram to Abraham, and that of his wife Sarai to Sarah	—— xvii. 1—22.
				In connection with this covenant, Circumcision is instituted	—— —— 10—14, 23—27.
	3357		2054	Abraham entertains three angels, under the appearance of travellers; they predict to Sarah the birth of a son (Isaac)	—— xviii. 1—15; Heb. xiii. 2.
				Sodom, Gomorrha, Admah and Zeboiim burnt by fire from heaven. Lot is preserved; retires to Zoar; commits incest with his daughters	—— xviii. 16—xix.38; 2 Pet. ii. 6—8.
2108		1892		Abraham departs from the plain of Mamre, to Beersheba	—— xx. 1.
2115	3358	1885	2053	Isaac born, the son of Abraham and Sarah. Sarah makes Abraham turn away Hagar and her son Ishmael. Hagar causes Ishmael to take an Egyptian woman to wife, by whom he has several children	—— xxi. 1—21.
2133	3357	1867	2054	Covenant between Abraham and Abimelech, king of Gerar	—— — 22—34.
	3383		2028	Abraham about to offer his son Isaac	—— xxii. 2—19.
2145	3395	1855	2016	Sarah dies, aged 127 years	—— xxiii.
2148	3398	1852	2013	Abraham sends Eliezer into Mesopotamia to procure a wife for his son Isaac, who was 40 years of age. Eliezer brings Rebekah	—— xxiv.
2150	3399	1850	2012	Abraham marries Keturah, by whom he has several children	—— xxv. 1—4.
2158		1842		Shem dies, the son of Noah, 500 years after the birth of Arphaxad	—— xi. 10, 11.
2167		1833		Rebekah continuing barren nineteen years, Isaac intercedes for her, and she obtains the favor of conception	—— xxv. 21—23.
2168	3418	1832	1993	Jacob and Esau born, Isaac being 60 years old	—— 24—26.
2184	3433	1817	1978	Abraham dies, aged 175 years	—— 7—11.
2187		1813		Heber dies, aged 464 years	—— xi. 17.
2200		1800		Isaac goes to Gerar. God renews with him his promises made to Abraham. Isaac covenants with Abimelech, king of Gerar	—— xxvi. 1—31.
2208		1792		Esau marries Canaanitish women	—— —— 34, 35.
	3615		1796	The deluge of Ogyges in Attica, 2020 years before the first Olympiad.	
2231	3481	1769	1930	Ishmael dies, the eldest son of Abraham, aged 137 years	—— xxv. 17, 18.
2245	3495	1755	1916	Isaac blesses Jacob instead of Esau. Jacob withdraws into Mesopotamia, to his uncle Laban. Here he marries Leah, and afterwards Rachel	—— xxvi.—xxix. 28.

Year of the World.		Year before Christ.		FROM THE CREATION TO THE BIRTH OF CHRIST.	
Calmet.	Hales.	Calmet.	Hales.		
2246	3496	1754	1915	Reuben born, son of Jacob and Leah	Gen. xxix. 32.
2247	3498	1753	1913	Simeon born, son of Leah	—— —— 33.
2248	3500	1752	1911	Levi born, son of Leah	—— —— 34.
2249	3501	1751	1910	Judah born, son of Leah	—— —— 35.
2259	3502	1741	1902	Joseph born, son of Jacob and Rachel, Jacob being 90 years old	—— xxx. 22—24.
2265		1735		Jacob resolves to return to his parents in Canaan. Laban pursues him, and overtakes him on mount Gilead. Esau comes to meet him, and receives him with much affection. Jacob arrives at Shechem	—— xxx. 25–xxxiii.20.
2273		1727		Dinah, Jacob's daughter, ravished by Shechem, son of Hamor. Dinah's brothers revenge this affront by the death of the Shechemites	—— xxxiv.
	3522		1889	Benjamin born, son of Rachel	—— xxxv. 16—18.
2276	3526	1724	1885	Joseph, being seventeen years old, tells his father, Jacob, of his brothers' faults; they hate him, and sell him to strangers, who take him into Egypt. Joseph sold there as a slave to Potiphar	—— xxxvii. 3—36.
				About this time Judah marries the daughter of Shuah, a Canaanite, by whom he has Er, Onan and Shelah	—— xxxviii. 1—5.
2286		1714		Joseph, tempted by the wife of his master Potiphar, refuses her; is put in prison	—— xxxix.
	3511		1899	The shepherds, expelled from Egypt, settle in Palestine.	
2287		1713		Joseph explains the dreams of the two officers of Pharaoh	—— xl.
2288		1712		Isaac dies, aged 180 years	—— xxxv. 28, 29.
2289	3439	1711	1872	Pharaoh's dreams explained by Joseph; Joseph is made governor of Egypt	—— xli. 1—46; Psalm cv. 17—21.
				The beginning of the seven years of plenty foretold by Joseph	—— xli. 47—49.
2290		1710		Manasseh born, son of Joseph	—— —— 50, 51.
2291		1709		Ephraim born, second son of Joseph	—— —— 52.
2296		1704		The beginning of the seven years of scarcity, foretold by Joseph	—— —— 53—57.
2297		1703		Joseph's ten brethren resort to Egypt to buy corn. Joseph imprisons Simeon	—— xlii.
2298		1702		Joseph's brethren return into Egypt, with their brother Benjamin. Joseph discovers himself, and engages them to settle in Egypt with their father, Jacob, then 130 years old	—— xliii.—xlv. Psalm cv. 17—23.
2300		1700		Joseph gets all the money of Egypt into the king's treasury	Gen. xlvii. 14.
2301		1689		Joseph gets all the cattle of Egypt for the king	—— —— 15—17.
2302		1698		The Egyptians sell their lands and liberties to Pharaoh	—— —— 18—22.
2302		1698		The end of the seven years of scarcity. Joseph returns the Egyptians their cattle and their lands, on condition that they pay the king the fifth part of the produce	—— —— 23—26.
2315	3565	1695	1846	Jacob's last sickness; he adopts Ephraim and Manasseh; foretells the character of all his sons; desires to be buried with his fathers. Dies, aged 147 years	—— —— 28—xlix.33.
2369	3619	1631	1792	Joseph dies, aged 110 years. He foretells the departure of the Israelties from Egypt, and desires his bones may be taken with them into Canaan	—— l. 24—26; Heb xi. 22.
2385		1615		Levi dies, ages 137 years	Test. of 12 patriarchs
2427	3683	1573	1728	A new king in Egypt, who knew neither Joseph nor his services. He oppresses the Israelites	Exod. i. 8—22.
	3074		2337	About this time lived Job, famous for his wisdom, virtue and patience	Book of Job.
2430	3686	1507	1725	Aaron born, son of Amram and Jochebed	Exod. vi. 20.
2433	3689	1567	1722	Moses born, brother to Aaron; is exposed on the banks	



The Pentateuch, as the Five Books of Moses are called, was written on a kind of parchment rolls, as shown in this illustration. This manuscript dates back about 3200 years, about to the year 1280 B. C.

Year of the World.		Year before Christ.		FROM THE CREA TION TO THE BIRTH OF CHRIST.	
Calmet.	Hales.	Calmet.	Hales.		
				of the Nile; is found by Pharaoh's daughter, who adopts him	Exod. ii. 1—10; Heb. xi. 23.
2473	3723	1527	1688	Moses goes to visit his brethren; kills an Egyptian; being informed that Pharoah knows of it, he retires into Midian; marries Zipporah, daughter of Jethro; has two sons by her, Gershom and Eliezer	—— — 11—22; Ex. xviii. 3, 4. Heb. xi. 24—26.
2513	3763	1487	1648	The Lord appears to Moses in a burning bush, while feeding his father-in-law's flock; sends him to Egypt to deliver Israel	——iii.—iv. 19.
				Moses returns into Egypt. His brother Aaron comes to meet him, to mount Horeb. The two brothers announce to Pharaoh the commands of the Lord; Pharaoh refuses to set Israel at liberty; but loads them with new burdens. Moses performs several miracles in his presence; these failing to convince the king, his people suffer several plagues	—— iv. 20—xii 29.
				1. Plague. Water changed into blood; about the 18th of 6th month	—— vii. 17—25.
				2. Plague. Frogs; 25th of 6th month	—— viii. 1—14.
				3. Plague. Gnats or lice; 27th of 6th month	—— — 15—19.
				4. Flies of all sorts; about the 28th and 29th of 6th month	—— — 20—32.
				5. Murrian on the cattle; about the 1st of the month	—— ix. 1—7.
				6. Boils; about the 3d of 7th month	—— — 8—12.
				7. Hail, thunder and fire from heaven; 4th of 7th month	—— — 18—35.
				8. Locusts; 7th of 7th month	—— x. 3—19.
				9. Darkness; 10th of 7th month	—— — 21—23.
				On this day Moses appoints that this month in future should be the 1st month according to the sacred style. Orders the passover, and sets apart the paschal lamb, which was to be sacrificed four days afterwards	—— xii.
				10. Death of the first-born of the Egyptians, in the night of the 14th or 15th of Abib	—— xi. 4—6; xii. 29—33.
				This same night, the Israelites celebrate the first passover; and Pharaoh expels them from Egypt	—— xii. 21–33; Heb. xi. 27, 28.
				Israel departs from Rameses to Succoth	—— — 37—39; Numb. xxxiii. 1—6.
				From Succoth to Etham	—— xiii. 17—22; Numb. xxxiii. 6.
				From Etham they turned south, and encamped at Pi-hahiroth; between Migdol and the sea, over against Baal-zephon	—— xiv. 1—19; Numb. xxxiii. 7.
				Pharoah pursues Israel with his army, and overtakes them at Pi-hahiroth; God gives the Hebrews a pillar of cloud to guide and protect them. The waters divided. Israel goes through on dry ground. The Egyptians are drowned; 21st of the first month	—— xiv. 19—31; Heb. xi. 29.
				Moses, having passed the sea, is now in the wilderness of Etham; after marching three days in the desert, Israel arrives at Marah, where Moses sweetens the water. From Marah they come to Elim. From Elim to the Red sea; then into the desert of Sin, where God sends manna; from thence to Dophcah, Alush and Rephidim, where Moses obtains water from a rock; 2d month	—— xv. 22—26. —— — 27; Numb. xxxiii. 9, 10. —— xvi. 1—xvii. 7; Numb. xxxiii. 10, 11. Numb. xxxiii. 12—14.
				About this place the Amalekites slay those who could not keep up with the body of Israel. Moses sends Joshua against them, while he himself goes to a mountain, and lifts up his hands in prayer	Exod. xvii. 8—16.
	3764		1647	On the third day of the third month, after their departure from Egypt, Israel comes to the foot of mount Sinai, where they encamp about a year	—— xix. 1, 2; Numb. xxxiii. 15.
				Moses goes up the mountain; God offers a covenant to Israel	Exod. xix. 3—6.
				Moses comes down from the mountain, and reports to	

Year of the World.		Year before Christ.			
Calmet.	Hales.	Calmet.	Hales		
2513	3764	1487	1647	the people what the Lord had proposed. The people declare their readiness to enter into this covenant...	Exod. xix. 7, 8.
				Moses again ascends the mountain; God orders him to bid the people prepare themselves to receive his law.	—— —9—15.
				On the third day after that notice, the glory of God appears on the mountain, accompanied by sound of trumpet and thunder. Moses stations the people at the foot of mount Sinai; he alone goes up the mountain. God directs him to forbid the people to ascend, lest they should suffer death. Moses goes down and declares these orders to the people. He then ascends again, and receives the decalogue.....	—— —16—xx. 17
				He returns, and proposes to the people what he had received from the Lord. The people consent, and covenant on the terms proposed.....	—— xx. 18—21.
				Moses goes again up the mountain; God gives him several judiciary precepts of civil polity. At his return, he erects twelve altars at the foot of the mountain, causes victims to be sacrificed to ratify the covenant, and sprinkles with the blood of the sacrifices the book that contained the conditions of the covenant. He also sprinkles the people, who promise obedience and fidelity to the Lord.....	—— —21—xxiv. 8.
				Moses, Aaron, Nadab, Abihu, and seventy elders of Israel, go up the mountain, and see the glory of the Lord. They come down the same day; but Moses, and his servant Joshua, stay there six days longer. The seventh day the Lord calls Moses, and during forty days shows him all that concerned his tabernacle, the ceremonies of sacrifice, and other things.....	—— xxiv. 9—xxxi. 18.
				After these forty days, God gives Moses the decalogue, written on two tables of stone, and bids him hasten down, because Israel had made a golden calf, and was worshipping it.....	—— xxxii. 1—14.
				Moses comes down, and finding the people dancing about their golden calf, he throws the tables of stone on the ground, and breaks them. Coming into the camp, he destroys the calf; slays by the sword of the Levites, three thousand Israelites, who had worshipped this idol.....	—— —- 15—30.
				The day following, Moses again goes up the mountain, and, by his entreaties, obtains from God the pardon of his people. God orders him to prepare new tables for the law; and promises not to forsake Israel.....	—— —— 31—xxxiv. 3.
				Moses comes down and prepares new tables; goes up again the day following; God shows him his glory. He continues again forty days and forty nights on the mountain, and God writes a second time his law on the tables of stone.....	—— xxxiv. 4—28.
				After forty days, Moses comes down, not knowing that his face shines with glory. He puts a veil over his face, discourses to the people, and proposes to erect a tabernacle to the Lord; to accomplish this, he taxes each Israelite at half a shekel. This occasions a numbering of the people, who amount to 603,550 men. He appoints Bezaleel and Aholiab to oversee the work of the tabernacle.....	—— —— 29—xxxv.35.
2514		1486		Construction of the tabernacle, on the first day of the first month of the second year, after the exodus....	—— xxxvi. 1—xl. 33.
				A second numbering of the people, the first day of the second month.....	Numb. i. 1—46.
				Consecration of the tabernacle, the altars and the priests, the fifth day of the second month.....	Lev. viii. 1—ix. 24.

Year of the World		Year before Christ.			
Cal-met.	Hales.	Cal-met.	Hales.		
2514	3764	1486	1647	The Levites numbered by themselves; they are consecrated to the service of the tabernacle, instead of the first-born of Israel	Numb. i. 47—53; iii. 5—iv. 49; viii.
				On the eighth day after the consecration of the tabernacle, the princes of the tribes, each on his day, offer their presents to the tabernacle	——— vii.
				Jethro comes to the camp, a few days before the departure of Israel from Sinai	Exod. xviii.
				On the twentieth day of the second month, (May,) the Israelites decamp from Sinai, and come to Taberah, or Burning; from thence to Kibroth-hattaavah, or the Graves of Lust, three days' journey from mount Sinai	Numb. x. 11—xi. 34; xxxiii. 16.
				Eldad and Medad prophesy in the camp	——— xi. 26, 27.
				Quails sent	——— — 31, 32; Ex. xvi. 13; Ps. lxxviii. 26—29; cv. 40.
				Israel arrives at Hazeroth; Aaron and Miriam murmur against Moses, because of his wife. Miriam continues seven days without the camp	——— — 35—xii. 15; xxxiii. 17.
				Israel comes to Rithmah, in the wilderness of Paran; thence to Kadesh-barnea; from whence they send twelve chosen men, one out of each tribe, to examine the land of Canaan	——— xii. 16—xiii. 20; xxxiii. 18.
				After forty days these men return to Kadesh-barnea, and exasperate the people, saying that this country devoured its inhabitants, and that they were not able to conquer it. Caleb and Joshua withstand them; the people mutiny: God swears that none of the murmurers should enter the land, but be consumed in the desert. The people resolve on entering Canaan, but are repelled by the Amalekites and the Canaanites	——— xiii. 21—xiv. 45.
2515		1485		Continue a long while at Kadesh-barnea. From hence they journey to the Red sea	——— xv.—xix. Deut. i. 46, ii. 1.

Names of the several Stations.

1. Rameses.	27. Mithcah.
2. Succoth.	28. Hathmonah.
3. Etham.	29. Moseroth.
4. Baal-zephon.	30. Bene-jaakan.
5. Desert of Etham.	31. Hor-Hagidgad.
6. Marah.	32. Jotbathah.
7. Elim.	33. Ebronah.
8. Coast of Red sea.	34. Ezion-gaber.
9. Desert of Sin.	35. Moseroth.
10. Dophcah.	36. Kadesh.
11. Alush.	37. Mount Hor.
12. Rephidim.	38. Zalmonah.
13. Sinai.	39. Punon.
14. Taberah.	40. Oboth.
15. Kibroth-hattaavah.	41. Ije-abarim.
16. Hazeroth.	42. Valley of Zared.
17. Rithmah.	43. Bamoth Arnon.
18. Rimmon-Parez.	44. Beer.
19. Libnah.	45. Muttanah.
20. Rissah.	46. Nahaliel.
21. Kehelathah.	47. Dibon-gad.
22. Mount Shapher.	48. Almon-diblathaim.
23. Haradah.	49. Mount Pisgah.
24. Makheloth.	50. Kedemoth.
25. Tahath.	51. Abel-shittim.
26. Tarah.	

(But see under the article EXODUS, p. 959.)

Probably at the encampment of Kadesh-barnea,

Year of the World.		Year before Christ.		FROM THE CREATION TO THE BIRTH OF CHRIST.	
Calmet.	Hales.	Calmet.	Hales.		
				happened the sedition of Korah, Dathan and Abiram	Numb. xv.—xix.
2552	3802	1448	1609	After wandering in the deserts of Arabia-Petræa and Idumea thirty-seven years, they return to Moseroth, near Kadesh-barnea, in the thirty-ninth year after the exodus	——— xxxiii. 19—30.
				Moses sends ambassadors to the king of Edom, to desire passage through his territories; he refuses.	——— xx. 14—21.
				The Israelites arrive at Kadesh. Miriam dies, aged 130 years	——— — 1; xxxiii. 36.
				The Israelites murmur for want of water. Moses brings it from the rock; but he, as well as Aaron, having shown some distrust, God forbids their entrance into the Land of Promise	——— — 2—13.
				From Kadesh they proceeded to mount Hor, where Aaron dies, aged 123 years; the first day of the fifth month	——— — 22—29; xxxiii. 37—39.
				King Arad attacks Israel, and takes several captives	——— xxi. 1—3; xxxiii. 40.
				From mount Hor they come to Zalmonah, where Moses raises the brazen serpent. Others think this happened at Punon	——— — 4—9. xxxiii. 41.
2553		1447		Sihon, king of the Amorites, refuses the Israelites a passage through his dominions. Moses attacks him, and conquers his country	——— — 23—31; Deut. ii. 26—37.
				Og, king of Bashan, attacks Israel, but is defeated	——— — 33—35; Deut. iii. 1—11.
				Israel encamps in the plains of Moab	——— xxii. 1—4; xxxiii. 48.
				Balak, king of Moab, sends for Balaam	——— — 5—xxiv. 25; Deut. xxiii. 4, 5.
				Israel seduced to fornication, and to the idolatry of Baal-Peor	——— xxv. 1—3; Ps. cvi.28,29;1 Cor.x.8.
				The people punished for their sin	——— — 4—15; Deut. iv. 3.
				War against the Midianites	——— — 16—18;xxxi.
				Distribution of the countries of Sihon and Og, to the tribes of Reuben and Gad, and the half-tribe of Manasseh	——— xxxii. Deut. iii. 12—22.
				Moses renews the covenant of Israel with the Lord	———xxxiii.50—xxxv; Deut. i.—xxxiii.
				Moses dies, being 120 years old, in the twelfth month of the holy year	Deut. xxxiv.
				Joshua succeeds him; sends spies to Jericho in the first month (March)	Josh. i. ii.
	3803		1608	The people pass the Jordan, the 10th of the first month	—— iii.
				The day following Joshua restores circumcision	—— iv.—v. 2—9.
				The first passover, after passing the Jordan; the 15th of the first month	—— v. 10, 11.
				Manna ceases	—— — 12.
				Jericho taken	—— — vi. 20—27.
				Israel comes to mount Ebal to erect an altar, pursuant to the order of Moses	—— viii. 30—35; Deut. xxvii.
				The Gibeonites make a league with Joshua	—— ix. 6—15.
				War of the five kings against Gibeon. Joshua defeats them; the sun and moon stayed	—— x. 1—27.
2554	3804	1446	1607	War of Joshua against the kings of Canaan. These wars occupy six years	—— — 28—xi. 23.
2559	3809	1441	1602	Joshua divides the conquered country among Judah, Ephriam, and the half-tribe of Manasseh	—— xv. 1—13, 20; xvi. xvii.
				He gives Caleb the portion that the Lord had promised him, and assists him in conquering it	—— xv. 7—15.
2560		1440		The ark and the tabernacle fixed at Shiloh, in the tribe of Ephraim	—— xviii. 1.
	3815		1596	Joshua distributes the country to Benjamin, Simeon,	——— — 11—xix. 49.

Year of the World.		Year before Christ.		FROM THE CREATION TO THE BIRTH OF CHRIST.	
Calmet.	Hales.	Calmet.	Hales.		
2560	3815	1440	1596	Zebulun, Issachar, Asher, Naphtali and Dan. Receives his own portion at Timnath-serah, on the mountain of Gahash	Josh. xix. 49—51.
				Reuben, Gad, and the half tribe of Manasseh, return beyond Jordan	—— xxii. 1—9.
2561		1439		Joshua renews the covenant between the Lord and the Israelites	—— xxiv.—xxiv. 28.
				Joshua dies, aged 110 years	—— xxiv. 29, 30.
				After his death, the elders govern about eighteen or twenty years; during which time happen the wars of Judah with Adoni-bezek	Judg. i.—iii. 1—5, xvii. —xxi.
				Anarchy; during which some of the tribe of Dan conquer the city of Laish.	
				In this interval happened the story of Micah, and the idolatry occasioned by his ephod.	
				Also, the war of the twelve tribes against Benjamin, to revenge the outrage committed on the wife of a Levite.	
				The Lord sends prophets, in vain, to reclaim the Hebrews. He permits, therefore, that they should fall into slavery	—— iii. 1—9.
2591	3839	1409	1572	Servitude of the Israelites, under Cushan-Rishathaim, king of Mesopotamia, eight years.	
2599	3847	1401	1564	Othniel delivers them; defeats Cushan-Rishathaim; judges the people forty years	—— — 10, 11.
2661	3887	1339	1524	Second servitude, under Eglon, king of Moab, about sixty-two years after the peace of Othniel	—— — 12—14.
2679	3905	1321	1506	Ehud delivers them, after about twenty years	—— — 15—30
				Third servitude of the Israelites, under the Philistines. Shamgar delivers them; year uncertain	—— — 31
2699 to 2719	3985 4006	1281	1426 1406	Fourth servitude, under Jabin, king of Hazor. Deborah and Barak deliver them, after twenty years	—— iv..—v.
2752	4045	1248	1366	Fifth servitude under the Midianites	—— vi. 1—6.
2759	4052	1241	1359	Gideon delivers Israel. He governs them nine years, from 2759 to 2768	—— — 7—viii. 32.
2768	4092	1232	1319	Abimelech, son of Gideon, procures himself to be made king of Shechem	—— ix. 1—52.
2771		1229		Abimelech killed, after three years	—— — 53, 54.
2772	4095	1228	1316	Tola, judge of Israel, after Abimelech; governs twenty-three years	—— x. 1, 2.
2795	4118	1205	1293	Jair judges Israel, chiefly beyond Jordan; governs twenty-two years	—— — 3—5.
2799	4140	1210	1271	Sixth servitude under the Philistines and the Ammonites	—— — 6—9.
2817	4158	1183	1253	Jephthah delivers the Israelites beyond Jordan	—— — 10—xii. 6.
2820		1180		The city of Troy taken, 408 years before the first Olympiad.	
2823	4164	1177	1247	Jephthah dies, Ibzan succeeds him	—— xii. 7—9
2830	4171	1170	1240	Ibzan dies, Elon succeeds him	—— — 10, 11.
2840	4181	1160	1230	Elon dies, Abdon succeeds him	—— — 12, 13.
2848	4229	1152	1182	Abdon dies. The high-priest Eli succeeds as judge of Israel	—— — 15. 1 Sam. i.—iv. 18.
	4189		1222	Seventh servitude under the Philistines, forty years	Judg. xiii 1.
2849	4209	1151	1202	Samuel born	1 Sam. i. 20.
				Under his judicature God raises Samson, born 2849	Judg. xiii. 2, &c.
2861	4259	1139	1152	God begins to manifest himself to Samuel	I Sam. iii.
2867		1133		Samson marries at Timnath	Judg. xiv.
2868		1132		Samson burns the ripe corn of the Philistines	—— xv. 1—5.
2867 to 2887		1113		Samson delivered to the Philistines by Delilah; kills himself under the ruins of the temple of Dagon, with a great multitude of Philistines. He defended Israel twenty years	—— xvi.
2888	4269	1112	1142	War between the Philistines and Israel. The ark of the Lord taken by the Philistines. Death	

Year of the World.		Year before Christ.			
Cal-met.	Hales.	Cal-met.	Hales.		
				of the high-priest Eli. He governed Israel forty years	1 Sam. iv. 1—18.
	4289		1122	The Philistines send back the ark with presents. It is deposited at Kirjath-jearim. Samuel acknowledged chief and judge of Israel, 39 or 40 years	—— v.—vii. 1—6, 15—17.
				Victory of the Israelites over the Philistines	—— vii. 7—14.
2908		1092		The Israelites ask a king of Samuel	—— viii. 5—22.
2909	4301	1091	1110	Saul is appointed king, and consecrated in an assembly of the people at Mizpeh. He reigned forty years	—— ix. Acts xiii. 21.
				Saul delivers Jabesh-gilead	I Sam. xi.
2911	4303	1089	1108	War of the Philistines against Saul	—— xiii. 5—8.
				Saul, not having obeyed Samuel's orders, is rejected of God	—— 9—14.
	4305		1106	Victory obtained by Jonathan over the Philistines	—— xiv.
2919	4311	1081	1100	Birth of David, son of Jesse.	
2930		1070		War of Saul against the Amalekites	—— xv.
2941		1059		Samuel sent by God to Bethlehem to anoint David	—— xvi. 1—13.
2942		1058		War of the Philistines against the Israelites. David kills Goliath	—— xvii.
2943		1057		Saul, urged by jealousy, endeavors to slay David	—— xviii. 8—xix. 17
2944	4337	1056	1074	David retires to Achish, king of Gath; withdraws into the land of Moab	—— xix. 18—xxii. 4.
				Saul slays Abimelech, and other priests. Abiathar escapes to David	—— xxii. 9—23.
				David delivers Keilah, besieged by the Philistines	—— xxiii. 1—6.
2945		1055		David flies into the wilderness of Ziph. Saul pursues him, but is obliged to return suddenly, on the news of an irruption of the Philistines	—— —— 14—28.
2946		1054		David withdraws to about En-gedi. He spares Saul, who had entered alone the cave where David and his men were concealed	—— —— 29—xxiv. 1—22.
2947		1053		Samuel dies, aged 98 years. He had judged Israel twenty-one years before the reign of Saul. He lived thirty-eight years afterwards	—— xxv. 1.
	4340		1071	David retires into the wilderness of Paran. The history of Nabal. David marries Abigail. Comes into the desert of Ziph; enters by night the tent of Saul, and takes away his lance and cruse of water. Withdraws to Achish, king of Gath, who assigns him Ziklag. Here he abides a year and four months	—— —— 1—xxvii. 12 — 1 Chron. xii. 1—22.
2949		1051		War of the Philistines against Saul. Saul consults the witch of Endor. He loses the battle, and kills himself	1 Sam. xxviii. xxxi. 1 Chron. x.
				The Amalekites pillage Ziklag. David recovers the plunder and captives	1 Sam. xxx.
				Ishbosheth, son of Saul, acknowledged king; reigns at Mahanaim beyond Jordan	2 Sam. ii. 8—11.
	4341		1070	David acknowledged king of Judah, is consecrated a second time. Reigns at Hebron	—— — 1—7.
2951		1049		War between Ishbosheth and David, four or five years	—— — 13—iii. 1.
2956		1044		Abner quits Ishbosheth; resorts to David; is treacherously slain by Joab	—— iii. 12—39.
				Ishbosheth assassinated	—— iv.
				David acknowledged king over all Israel; consecrated a third time at Hebron	—— v.1—5;1 Chron. — xi. 1—3
2957	4348	1043	1063	Jerusalem taken from the Jebusites by David, who makes it the royal city	—— — 6—10; 1Chr. xi. 4—9
2958	4350	1042	1061	War of the Philistines against David. He beats them at Baal-perazim	—— — 17—20;1Chr. xiv. 11.
2959	4351	1041	1060	David brings the ark from Kirjath-jearim to Jerusalem; commits it to Abinadab. After three months, David brings it to his own palace	—— vi. 1 Chron.xiii. 5—14;xv.xvi.
2960	4356	1040	1055	David designs to build a temple to the Lord; is diverted from it by the prophet Nathan	—— vii.1Chron.xvii.

Year of the World.		Year before Christ.		FROM THE CREATION TO THE BIRTH OF CHRIST.	
Cal-met.	Hales.	Cal-met.	Hales.		
2960	4356	1040	1055	David's wars against the Philistines, against Hadadezer, against Damascus, and against Idumea; continued about six years	2 Sam. viii. 1 Chron. xviii.
2967		1033		David's war against the king of the Ammonites, who had insulted his ambassadors; and against the	
2968		1032		Syrians, who had assisted the Ammonites	——— x. 1 Chron. xix
2969	4359	1031	1052	Joab besieges Rabbah, the capital of Ammonites. David commits adultery with Bathsheba, and causes Uriah to be killed. Rabbah taken	——— xi. xii. 26—31; 1 Chr. xx. 1—3.
2970		1030		After the birth of the son conceived by the adultery of David with Bathsheba, Nathan reproves David: his deep repentance	——— xii. 1—25; Ps. li.
2971	4361	1029	1050	Solomon born	——— — 24, 25.
2972		1028		Amnon, David's son, ravishes Tamar	——— xiii. 1—20.
2974		1026		Absalom kills Amnon	——— — 22—39.
2977		1023		Joab procures Absalom's return	——— xiv. 1—27.
2979		1021		Absalom received at court, and appears before David	——— — 28—33.
2981	4375	1019	1036	Absalom's rebellion against David	——— xv. 1—xviii. 8.
				Absalom killed by Joab	——— xviii. 9—33.
				Sedition of Sheba, the son of Bichri, appeased by Joab.	——— xx.
2983		1017		Beginning of the famine sent to avenge the death of the Gibeonites, unjustly slain by Saul: ended 2986.	——— xxi. 1—14.
2987	4379	1013	1032	David numbers the people. God gives him the choice of three plagues, by which to be punished.	——— xxiv. 1—16; 1Chr.xxi.1—17.
2988		1012		David prepares for building the temple on mount Zion, in the threshing floor of Araunah	——— xxiv. 18—25; 1Chr. xxi. 18—27.
				Rehoboam born, son of Solomon	1 Kings xiv. 21.
2989	4381	1011	1030	Abishag, the Shunamite, given to David	——— i. 1—15.
				Adonijah aspires to the kingdom. David causes his son Solomon to be crowned. Solomon proclaimed king by all Israel	——— i. 5—53.
2990		1010		David dies, aged 70 years; having reigned seven years and a half over Judah at Hebron, and thirty-three years over all Israel, at Jerusalem	——— ii. 1—11; 1 Chr. xxix. 26—30.
				Solomon reigns alone, having reigned about six months in the life-time of his father David. He reigned forty years	— — xi. 42.
				Adonijah slain	— — ii. 12—25.
				Abiathar deprived of the office of high-priest. Zadok in future enjoys it alone	— — — 26, 27.
				Joab slain in the temple	——— — 28—34.
2991		1009		Solomon marries a daughter of the king of Egypt	——— iii. 1.
				Solomon goes to Gibeon to offer sacrifices, and to pray to God there. God grants him singular wisdom	——— — 3—15; 2Chr. i. 3—12.
				Solomon gives a remarkable sentence between 2 women	——— — 16—28.
2992		1008		Hiram, king of Tyre, congratulates Solomon on his accession to the crown; Solomon requires of him timber and workmen to assist in building the temple	——— v.
	4384		1027	Solomon lays the foundation of the temple, 2d day of the 2d month (May)	——— vi. vii. 2 Chr. ii.—iv.
3000	4391	1000	1020	Temple of Solomon finished; being seven years and a half in building, and dedicated the year following,	
3001		999		probably, because of the solemnity of the year of Jubilee that then happened	——— viii. 2 Chron. v. —vii.
3012		988		Solomon finishes the building of his palace, and that of his queen, the daughter of Pharaoh	——— ix. 1—10.
				Visit of the queen of Sheba	——— x. 1—10; 2Chr. ix. 1—9.
3026		974		Jeroboam, son of Nebat, rebels against Solomon. He flies into Egypt	——— xi. 26—40.
3029	4420	971	991	Solomon dies	——— —41—43; 2Chr. ix. 29—31.
	4421		990	Rehoboam succeeds him; alienates the Israelites, and occasions the revolt of the ten tribes. Jeroboam, the son of Nebat, acknowledged king of the ten tribes	——— xii. 1—20; 2 Chron. x.

Year of the World.		Year before Christ.		FROM THE CREATION TO THE BIRTH OF CHRIST.	
Cal-met.	Hales.	Cal-met.	Hales.		
				KINGS OF JUDAH—388 Years.	
3029					
	4421	971	990	Rehoboam intends to subdue the ten tribes, but forbears; reigned seventeen years	1 Kings xii. 21—24; xiv. 21; 2 Chr. xi. 1—4.
3030		970		The priests and Israelites that fear the Lord withdraw in great numbers from the kingdom of Israel, into that of Judah	2 Chr. xi. 12—17.
3032					
3033	4424	968	987	Rehoboam becomes impious	——— xii. 1.
	4426	967	985	Shishak, king of Egypt, comes to Jerusalem, plunders the temple and the king	——— — 2—9.
3046					1 Kings xiv. 25, 26.
	4438	954	973	Rehoboam dies. Abijam succeeds him; reigns three years	——— —29—31; 2Chr. xii. 15, 16.
3047		953		Abijam's victory over Jeroboam, who loses many thousands of his troops	2 Chr. xiii. 3—20.
3049					
	4441	951	970	Abijam dies. Asa succeeds him	——— xv. 7—9; 2Chr. xiii. 22; xiv. 1.
3053		947		Asa suppresses idolatry in Judah	——— —11—15; 2Chr. xiv. 2—5; xv.
3055					
3063		945		Jehoshaphat born, son of Asa	——— xxii. 42.
3064		937		Asa's victory over Zerah, king of Ethiopia, or Cush	2 Chron. xiv. 8—15.
		936		Asa engages Benhadad, king of Syria, to make an irruption into the territories of the kingdom of Israel, to force Baasha to quit his undertaking at Ramah	1 Kings xv. 18—20; 2 Chr. xvi. 2—4.
3080		920		Jehoram born, son of Jehoshaphat. Hesiod, the Greek poet, flourishes.	
3087		913		Asa, troubled with a lameness in his feet, (probably the gout,) places his confidence in physicians	——— — 23; 2 Chron. xvi. 12.
3090		910		Asa dies, having reigned 41 years	——— — 24; 2 Chron. xvi. 13, 14.
	4482		929	Jehoshaphat succeeds Asa; expels superstitious worship	——— — 24; 2 Chron. xvii. 1—19; xx. 31—33.
3097		903		Ahaziah born, son of Jehoram and Athaliah, and grandson of Jehoshaphat.	
3106		894		Jehoshaphat nominates his son Jehoram king; makes him his viceroy.	
3107		893		Jehoshaphat accompanies Ahab in his expedition against Ramoth-gilead, where he narrowly escapes a great danger	——— xxii. 1—33; 2 Chr. xviii. 1—32.
3108		892		Jehoshaphat equips a fleet for Ophir; Ahaziah, king of Israel, participating in his design, the fleet is destroyed by tempest	——— — 48; 2Chr. xx. 35—37.
				About this time Jehoshaphat is invaded by the Ammonites and Moabites, over whom he obtains a miraculous victory	2 Chron. xx. 1—30.
				Elijah the prophet removed from this world in a fiery chariot	2 Kings ii.
3112		888		Jehoshaphat invests his son Jehoram with the royal dignity	——— viii. 16, 17.

Year of the World. Cal-met.	Hales.	Year before Christ. Cal-met.	Hales.		
				KINGS OF ISRAEL.—254 Years.	
3029	4421	971	990	Jeroboam, son of Nebat, the first king of Israel; that is, the revolted ten tribes	1 Kings xii. 20.
3030		970		Jeroboam, son of Nebat, king of Israel, abolishes the worship of the Lord, and sets up the golden calves; reigned nineteen years	——— — 26—33; 2 Chron. xi. 14,15.
3047	4439	953	972	Jeroboam overcome by Abijah, who kills 500,000 men	2 Chron. xiii. 3—20.
3050	4443	950	968	Jeroboam dies, Nadab his son succeeds; reigns two years	1 Kings xiv. 20; xv. 25.
3054	4445	946	966	Nadab dies, Baasha succeeds him; reigns twenty years	——— xv. 27, 28.
3064		936		Baasha builds Ramah, to hinder Israel from going to Jerusalem	——— — 17; 2 Chron. xvi. 1.
				Ben-hadad, king of Damascus, invades the country of Baasha	——— — 20; 2 Chron. xvi. 4, 5.
3074	4468	926	943	Baasha dies, Elah his son succeeds him; reigns two years	——— xvi. 1—8.
3075	4469	925	942	Elah killed by Zimri, who usurps the kingdom seven days	——— — 9—15.
				Omri besieges Zimri in Tirzah; he burns himself in the palace	——— — 16—20.
3079		921		Omri prevails over Tibni; reigns alone in the 31st year of Asa	——— — 21—23.
3080		920	938	Omri builds Samaria; makes it the seat of his kingdom.	——— — 23—27.
3086	4473	914	931	Omri dies	——— — 28.
				Ahab his son succeeds; reigns 22 years	——— — 29.
				The prophet Elijah in the kingdom of Israel.	
3096	4503	904	908	He presents himself before Ahab, and slays the false prophets of Baal	——— xvii. xviii.
3103		897	897	Ben-hadad, king of Syria, besieges Samaria; is forced to quit it	——— xx. 1—21.
3104		896		Returns next year; is beaten at Aphek	——— — 22—34.
3105		895		Ahab seizes Naboth's vineyard	——— xxi.
3106		894		Ahab invests his son Ahaziah with royal power and dignity	——— xxii. 40; 2 Kings i. 1—18.
3107		893		Ahab wars against Ramoth-gilead; is killed in disguise	——— — 1–40; 2 Chr. xviii.
				Ahaziah succeeds; reigns two years	——— — 40.
3108		892		Ahaziah falls from the platform of his house; is dangerously wounded	2 Kings i. 2.
	4504		907	Ahaziah dies; Jehoram his brother succeeds him	——— – 16–18; iii. 1–3.
				He makes war against Moab	——— iii. 4—10.
3109	4520	891	891	Elisha foretells victory to the army of Israel, and procures water in abundance	——— — 11—20.

Year of the World. Cal-met.	Year of the World. Hales	Year before Christ. Cal-met.	Year before Christ. Hales.		
				KINGS OF JUDAH.—388 Years.	
3115	4507	885	904	Jehoshaphat dies, having reigned twenty-five years; Jehoram succeeds	1 Kings xxii. 50; 2 Chr. xxi. 1.
				The Idumeans revolt, and assert their liberty	2 Kings viii. 20; 2 Chr. xxi. 8—10.
3116		884		Jehoram, at the importunity of his wife, Athaliah, introduces into Judah the worship of Baal	——— — 18; 2 Chr. xxi. 6, 11.
3117		883		Jehoram smitten of God, with an incurable distemper in his bowels	2 Chron. xxi. 18, 19.
3118		882		Jehoram makes his son Ahaziah viceroy, or associate in his kingdom	
3119	4515	881	896	Jehoram dies; he reigned four years Ahaziah reigns but one year	2 Kings viii. 24—29; 2 Chr. xxii. 1, 2.
				Joash, or Jehoash, born.	
				Homer, the Greek poet, flourishes.	
3120	4516	880	895	Ahaziah accompanies Jehoram, king of Isreal, to the siege of Ramoth-gilead	2 Chron. xxii. 5.
				Ahaziah slain by Jehu	2 Kings ix. 16—28; 2 Chr. xxii. 8, 9.
				Athaliah kills all the royal family; she usurps the kingdom. Joash is preserved, and kept secretly in the temple six years	——— xi. 1—3, 2 Chr. xxii. 10—12.
3126	4522	874	889	Jehoiada, the high-priest, sets Joash on the throne of Judah, and slays Athaliah. Joash reigns forty years	——— — 4—21;2 Chr. xxiii.
3140		860		Amaziah born, son of Joash.	
3147		853		Joash repairs the temple	——— xii. 1—16;2Chr. xxiv. 1—14.
3164	4562	836	849	Zechariah, the high-priest, son of Jehoiada, killed in the temple by order of Joash	2 Chron. xxiv. 17—22.
				Hazael, king of Syria, wars against Joash	2 Kings xii. 17.
3165		835		Hazael returns against Joash; forces large sums from him	2 Chron. xxiv. 23, 24.
				Joash dies, Amaziah succeeds him; reigns twenty-nine years	2 Kings xii. 19—21; xiv. 1, 2.
3177		823		Amaziah wars against Idumea	——— xiv. 7; 2 Chr. xxv. 11, 12.
3178	4591	822	820	Amaziah wars against Joash, king of Israel; is defeated by him	——— — 8–15; 2 Chr. xxv. 17—24.
				Uzziah, or Azariah, born, son of Amaziah.	
3194		806		Amaziah dies	——— — 17—20; 2 Chr. xxv. 27, 28.
			An interregnum of eleven years.		
	4602		809	Uzziah, or Azariah, succeeds him; reigns fifty-two years	——— xv. 1, 2; 2 Chr. xxvi. 1—21.
				In Judah, the prophets Isaiah and Amos, under this reign	Isaiah i. 1; Amos i. 1.
3221		779		Jotham born, son of Uzziah.	

Year of the World.		Year before Christ.		FROM THE CREATION TO THE BIRTH OF CHRIST.	
Cal-met.	Hales.	Cal-met.	Hales.		
				KINGS OF ISRAEL.—254 Years.	
3119	4526	881	885	Samaria besieged by Ben-hadad, king of Syria. Ben-hadad and his army, seized with a panic fear, flee in the night	2 Kings vi. 24.—vii. 7.
3120		880		Elisha, going to Damascus, foretells the death of Ben-hadad, and the reign of Hazael	——— viii. 7—13.
				Jehoram marches with Ahaziah against Ramoth-gilead; is dangerously wounded, and carried to Jezreel	——— —— 28, 29.
				Jehu rebels against Jehoram; kills him. Jehu reigns twenty-eight years	——— ix. 14—x. 36.
3148		852	867	Jehu dies; his son Jehoahaz, succeeds him; reigns seventeen years	——— x. 35, 36; xiii. 1—8.
3165	4561	835	850	Jehoahaz dies; Joash, or Jehoash, succeeds him	——— xiii. 9, 10.
				Elisha dies about this time	——— —— 14—21.
3168	4579	832	832	Hazael, king of Syria, dies; Ben-hadad succeeds him	——— —— 24.
				Joash wars against Ben-hadad	——— —— 25.
3178		822		Joash obtains a great victory over Amaziah, king of Judah	——— xiv. 8—14.
3181		819	834	Joash dies; Jeroboam II. succeeds him; reigns forty-one years	——— —— 15, 16, 23, 24, 27.
				The prophets Jonah, Hosea and Amos, in Israel, under this reign	——— —— 25; Hos. i. 1; Amos i. 1.
3222	4618	778	793 An interregnum of 22 years, after the death of Jeroboam II. Zacha.	Jeroboam II. dies; Zachariah his son succeeds him; reigns six months; or perhaps ten years	——— — 28, 29; xv. 8, 9.
				The chronology of this reign is perplexed. 2 Kings xv. 8, 12, places the death of Zachariah in the 38th year of Uzziah, allowing him a reign of but six months. Yet, reckoning what time remains to the end of the kingdom of Israel, we must either admit an interregnum of nine or eleven years, between Jeroboam II. and Zachariah, as Usher does; or	

Year of the World.		Year before Christ.		FROM THE CREATION TO THE BIRTH OF CHRIST.	
Calmet.	Hales.	Calmet.	Hales.		
				KINGS OF JUDAH.—388 Years.	
3246	4654	754	757	Uzziah dies; Jotham, his son, succeeds, reigns sixteen years	2 Kings xv. 6, 7; 2 Chr. xxvi. 22, 23.
				Isaiah sees the glory of the Lord	Is. vi. John xii. 39—41.
				Isaiah and Hosea continue to prophesy.	
3252		748		Hezekiah born, son of Jotham.	
3261		739		Rezin, king of Syria, and Pekah, king of Israel, invade Judah	2 Kings xv. 37.
3262	4670	738	741	Jotham dies; Ahaz succeeds him; reigns sixteen years	——— —38; xvi. 1, 2.
				Rezin, king of Syria, and Pekah, king of Israel, continue hostilities against Judah	——— xvi. 5; 2 Chron. xxviii.
				Isaiah foretells to Ahaz the birth of the Messiah, and a speedy deliverance from the two kings his enemies. Nevertheless, the year following, they return	
3263		737		and spoil his country	Isaiah vii.—ix.
3264		736		The Idumeans and Philistines also invade Judah	2 Chron. xxviii. 16—18.
				Ahaz invites to his assistance Tiglath-pileser, king of Assyria, and submits to pay him tribute	2 Kings x vi. 7, 8; 2. Chr. xxviii. 16.
3277	4686	723	725	Ahaz remits the royal authority to his son Hezekiah.	
3278		722		Ahaz, king of Judah, dies	——— — 19, 20; 2 Chr. xxviii. 27.

PHARAOHS OF EGYPT.

These portraits were made from likenesses found on caskets and in the tombs of these ancient peoples.

Year of the World.		Year before Christ.		FROM THE CREATION TO THE BIRTH OF CHRIST.	
Calmet.	Hales.	Calmet.	Hales.		
				KINGS OF ISRAEL.—254 Years.	
			riah ascends the throne	We must suppose Jeroboam II. reigned five years; or that his reign did not begin till 3191, and ended	
	4640		771	in 3232, which is the year of the death of Zachariah.	
3232		768		Zachariah killed by Shallum, after reigning six months	2 Kings xv. 10—12.
3233	4641	767	770	Shallum reigns one month; is killed by Menahem, who reigns ten years	——— — 13—17.
				Pul, king of Assyria, invades Israel; Menahem becomes tributary to him	——— — 19—21.
3243	4651	757	760	Menahem dies; Pekaiah, his son, succeeds	——— — 22—26.
3245	4653	755	758	Pekaiah assassinated by Pekah, son of Remaliah, who reigns twenty-eight years. The text allows 20 years only; but we must read 28 years. Syncellus says (p. 202.) it was 28 years, in a copy quoted by Basil. And indeed, his reign began in the 52d of Azariah, (2 Kings xv. 27.) and ended in the 12th of Ahaz, (2 Kings xvii. 1.) which includes 28 years	——— xv. 25—28.
			An interregnum of ten years		
3254	4701	746	710	Arbaces, governor of Media, and Belesus, governor of Babylonia, besiege Sardanapalus, king of Assyria, in Nineveh	Diod. Sic. lib. ii. Athenæus, lib. xii. Herod. lib. i.
3257	4704	743	707	After a siege of three years, Sardanapalus burns himself in his palace, with all his riches. Arbaces is acknowledged king of Media, and Belesus king of Babylonia	Justin. lib. i. c. 3.
	4664		747	Belesus, otherwise Baladan, or Nabonassar, founds the Babylonian empire. This famous epoch of Nabonassar, falls 743 years before Christ; 747 before A. D.	Nic. Dam. in Eclog. Vales. p. 426, &c.
				Minus junior, called in Scripture Tiglath-pileser, successor of Sardanapalus, continues the Assyrian empire, but reduced into very narrow limits. Reigned nineteen years; according to others, thirty years	2 Kings xv. 29; xvi. 7. Euseb. Chron. p. 46.
3264	4673	736	738	Tiglath-pileser defeats and slays Rezin, king of Damascus	——— xvi. 5—9; Amos i. 5.
	4675		736	Enters the land of Israel, takes many cities and captives; chiefly from Reuben, Gad, and the half-tribe of Manasseh. The first captivity of Israel	——— xv. 29; 1 Chron. v. 26.
3265	4683	735	728	Hoshea, son of Elah, slays Pekah, and usurps the kingdom	——— — 30, 31.
3274		726		Reigns peaceably the 12th year of Ahaz; reigns nine years	——— xvii. 1.
3276	4687	724	724	Shalmaneser succeeds Tiglath-pileser, king of Nineveh	Castor, ap. Euseb. Chron. p. 46.

Year of the World.		Year before Christ.			
Cal-met.	Hales.	Cal-met.	Hales.		
				KINGS OF JUDAH.—388 Years.	
3278	4686	722	725	Hezekiah restores the worship of the Lord in Judah, which Ahaz had subverted..	2 Kings xviii. 1—6; 2 Chr. xxix.—xxxi.
3279		721		First-fruits and tythes again gathered into the temple, for maintenance of the priests and ministers.....	2 Chron. xxxi. 4, 5.
3290		710		Hezekiah revolts from the Assyrians; makes a league with Egypt and Cush, against Sennacherib.....	2 Kings xviii. 7.
3291	4700	709	711	Sennacherib invades Hezekiah; takes several cities of Judah.....	——— —— 13; 2 Chr. xxxii. 1; Is. xxxvi.
	4701		710	Hezekiah' sickness. Isaiah foretells his cure; gives him as a sign, the shadow's return on the dial of Ahaz.....	——— xx. 1—11; 2 Chr. xxxii. 24; Is. xxxviii.
				Sennacherib besieges Lachish.....	2 Chron. xxxii. 9.
				Hezekiah gives money to Sennacherib, who yet continues his war against him, and send Rabshakeh to Jerusalem; marches himself against Tirhakah, king of Cush, or Arabia. Returning into Judah, the angel of the Lord destroys many thousands of his army; he retires to Nineveh, where he is slain by his sons.....	2Kingsxviii.14—xix.37; Is. xxxvi. xxxvii. Herod. lib. ii.

Year of the World. Cal-met.	Year of the World. Hales.	Year before Christ. Cal-met.	Year before Christ. Hales.		
				KINGS OF ISRAEL.—254 Years.	
3279	4692	721	719	Hoshea makes an alliance with So, king of Egypt, and endeavors to shake off the yoke of Shalmaneser....	2 Kings xvii. 4.
3280	4690	720	721	Shalmaneser besieges Samaria; takes it after three	
3283	4692	717	to 719	years' siege. Carries beyond the Euphrates the tribes that Tiglath-pileser had not already carried into captivity; the ninth year of Hoshea; of Hezekiah the sixth year.....	——— — 3—18; Hos. xiii. 16; 1 Chr. v. 26
				Among the captives carried away by Shalmaneser to Nineveh, is Tobit, of the tribe of Naphtali.....	Tobit i.
				End of the kingdom of Israel; after it had subsisted two hundred and fifty-four years.	

Year of the World. Calmet.	Year of the World. Hales.	Year before Christ. Calmet.	Year before Christ. Hales.		
				JUDAH alone.	
3292	4703	708	708	Assaradon, or Esar-Haddon, succeeds Sennacherib....	2 Kings xix. 37; Isaiah xxxvii. 38.
				Probably about this time Baladan, or Merodach-Baladan, king of Babylon, sends to congratulate Hezekiah on the recovery of his health, and to inquire about the prodigy on that occasion.....	——— xx. 12—19; Isa. xxxix.
				The prophets Micah, the Morasthite, and Nahum, prophesy.....	Mic. i. 1.
3293		707		Tartan sent by Assaradon against the Philistines, the Idumeans, and the Egyptians.....	2 Kings xviii. 17; Is.xx; Joseph.Ant.lib. x. cap. 1, 2.
3294		706		Assaradon sends an Israelitish priest to the Cushites settled at Shechem.....	——— xvii. 27—33.
3306	4715	694	696	Hezekiah dies; Manasseh succeeds him; reigns fifty-five years.....	———xx. 20, 21; xxi. 1. —18; 2 Chr. xxxii. 32, 33; xxxiii. 1—10.
3323	4731	677	680	Assaradon becomes master of Babylon; reunites the empires of Assyria and Chaldea.....	Canon. Ptolemæi.
3329	4737	661	674	Manasseh taken by the Chaldeans, and carried to Babylon.....	2 Chr. xxxiii. 11—19; Jos. Ant. lib. x. c.4.
3347	4771	653	640	The war of Holofernes, who is slain in Judea by Judith.....	Judith, Apoc.
3361	4770	639	641	Menasseh dies. He returned into Judea a good while before, but the time is not exactly known...	2 Kings xxi. 17, 18; 2 Chr. xxxiii. 20.
				Amon succeeds him; reigns two years.....	——— — 18—22;2 Chr. xxxiii.20—23.
3363	4772	637	639	Amon dies; Josiah succeeds him.....	——— — 23—26;2 Chr. xxxiii.24—25.
				Zephaniah prophesies at the beginning of his reign....	Zeph. i. 1.
3370		630		Josiah endeavors to reform abuses. He restores the worship of the Lord.....	2 Kings xxii. 1—7;2Chr. xxxiv. 1—13.
3376	4783	624	628	Jeremiah begins to prophesy, in the thirteenth year of the reign of Josiah.....	Jer. i. 2.
3380		620		The high-priest Hilkiah finds the book of the law in the treasury of the temple, in the eighteenth year of Josiah.....	2 Kings xxii. 8; 2 Chr. xxxiv. 14.
				Money collected for repairing the temple.....	——— — 4—7; 2 Chr. xxxiv. 9—14.
				The prophetess Huldah foretells the calamities that threaten Judah.....	——— — 14—20;2 Chr. xxxiv. 22—28.
3381		619		A solemn passover, by Josiah and all the people.....	——— xxiii.1—24;2 Chr xxxiv. 29— xxxv. 19.
3394		606		Joel prophesies under Josiah.	
				Josiah opposes the expedition of Necho, king of Egypt, against Carchemish; is mortally wounded, and dies at Jersualem. Jeremiah composes lamentations on his death.....	———29, 30; 2 Chr. xxxv. 20—27. Herod.lib.2; Jos. Ant. lib. x. c. 6.
	4803		608	Jehoahaz is set on the throne by the people; but Necho, returning from Carchemish, deposes him, and installs Eliakim, or Jehoiakim, his brother, son of Josiah, who reigns eleven years.....	——— — 30—36;2 Chr. xxxvi. 1—5.
3395		605		Habakkuk prophesies under his reign.	
3398	4825	602	586	Nebuchadnezzar besieges and takes Carchemish; comes into Palestine; besieges and takes Jerusalem; leaves Jehoiakim there, on condition of paying him a large tribute.....	2 Kings xxiv. 1; 2 Chr. xxxvi. 6, 7.
				Daniel and his companions led captive to Babylon...	Jer. xx. 4; xlvi. 2; Dan. i. 1—7.
3399		601		Jeremiah begins to commit his prophecies to writing..	—— xxxvi. 1—4.
3402		598		Nebuchadnezzar's dream of a great statue explained by Daniel.....	Dan. ii.
3404		596		The history of Susannah at Babylon.....	Susannah, Apoc.
				Jehoiakim revolts against Nebuchadnezzar.....	2 Kings xxiv. 1.
	4806		605	Nebuchadnezzar sends an army from Chaldea, Syria,	

Year of the World.		Year before Christ.			
Calmet.	Hales.	Calmet.	Hales.		
				JUDAH alone.	
				and Moab, which ravages Judea, and brings away 3023 Jews to Babylon, in the seventh year of Jehoiakim	2 Kings xxiv. 2—4; Jer. lii. 8.
3405	4812	595	599	Cyrus born, son of Cambyses and Mandane	Diod. Sic. lib. i. Herod. lib. i.
				Jehoiakim revolts a second time against Nebuchadnezzar. Is taken, put to death, and cast to the fowls of the air. Reigned eleven years	2 Kings xxiv. 5,6; 2Chr. xxxvi. 8; Jer. xxii. 18, 19; xxxvi. 30.
3406		594		Jehoiakim, or Coniah, or Jeconiah, succeeds	——— — 6; 2 Chron. xxxvi. 8, 9.
				Nebuchadnezzar besieges him in Jerusalem, and takes him after he had reigned three months and ten days. He is carried to Babylon, with part of the people. Mordecai is among the captives	——— —— 8—16; 2 Chr. xxxvi. 10.
	4814		597	Zedekiah, his uncle, is left at Jerusalem in his place, and reigns eleven years	——— — 17, 18; 2Chr. xxxvi. 10, 11.
				Zedekiah sends ambassadors to Babylon.	
				Jeremiah writes to the captive Jews there	Jer. xxix.
3409		591		Seraiah and Baruch sent by Zedekiah to Babylon.	
3410	4821	590	590	Ezekiel begins to prophesy in Chaldea	Ezek. i. 1, 2.
3411		589		He foretells the taking of Jerusalem, and the dispersion of the Jews	——— iv. v. viii.—xii.
				Zedekiah takes secret measures with the king of Egypt, to revolt against the Chaldeans	2 Kings xxiv. 20; 2 Chr. xxxvi. 13; Jer. lii. 3.
3414	4823	586	588	Zedekiah revolts.	
				Nebuchadnezzar marches against Jerusalem, besieges it; quits the siege to repel the king of Egypt, who comes to assist Zedekiah. Returns to the siege	——— xxv. 1, 2; Jer. xxxvii. 5.
				Jeremiah continues prophesying during the whole siege; which continued almost three years	Jer. xxxvii. 6—11; xxvii. xxi.
				Ezekiel also describes the same siege in Chaldea	Ezek. xxiv.
3416		584		Jerusalem taken on the ninth day of the fourth month, (July,) the eleventh year of Zedekiah	2 Kings xxv. 3, 4, 8; 2Chr. xxxvi. 17, 18; Jer. lii. 5—7.
				Zedekiah, endeavoring to fly by night, is taken, and brought to Riblah, to Nebuchadnezzar. His eyes are put out, and he is carried to Babylon	——— — 4—7; Jer. lii. 7—11
	4825		586	Jerusalem and the temple burnt; seventh day of the fourth month	——— — 9, 10; 2 Chr. xxxvi. 19; Jer. xxxix. 8; Jer. lii. 12, 13; Jos. Bel. lib. vii. c. 10.
				The Jews of Jerusalem and Judah carried captive beyond the Euphrates. The poorer classes only left in the land	——— — 11, 12; 2Chr xxxvi. 20; Jer. xxxix. 9, 10; lii. 15, 16.
				Thus ends the kingdom of Judah, after it had subsisted four hundred and sixty-eight years, from the beginning of the reign of David; and three hundred and eighty-eight years from the separation of Judah and the ten tribes	
				The beginning of the seventy year's captivity, foretold by Jeremiah	Jer. xxv.
				Gedaliah made governor of the remains of the people. He is slain	2 Kings xxv. 22—25; Jer. xl. 1—xli. 1, 2.
3417		583		Jeremiah carried into Egypt by the Jews, after the death of Gedaliah. He prophesies in Egypt	Jer. xliii. 5—13.
				Ezekiel in Chaldea prophesies against the captives of Judah	Ezek. xxxiii.
3419	4827	581	584	The siege of Tyre by Nebuchadnezzar; lasted thirteen years. During this interval, Nebuchadnezzar	Jer. xxvii.—xxix.

Year of the World.		Year before Christ.		FROM THE CREATION TO THE BIRTH OF CHRIST.	
Cal-met.	Hales.	Cal-met	Hales.		
3419	4827	581	584	wars against the Idumeans, the Ammonites, and the Moabites	Ezek. xxv. Jos. Ant. lib. x. c. 11.
				Obadiah prophesies against Idumea.	
3432	4840	568	571	Tyre taken by Nebuchadnezzar	Ezek. xxix. 18; Jos. Ant. lib. x. c. 11.
	4841		570	Nebuchadnezzar wars against Egypt	—— —— 19—xxxii. 32.
3433		567		He returns to Babylon.	
3434		566		Nebuchadnezzar's dream of a great tree	Dan. iv. 1—27.
3435		565		His metamorphosis into an ox	—— — 28—33.
3443		557		His return to his former condition	—— — 34—37.
3444	4842	556	569	He sets up a golden statue for worship	—— iii. 1—7.
				Daniel's three companions cast into the fiery furnace	—— — 8—30.
				Nebuchadnezzar's death, after reigning forty-three years, from the death of Nabonassar, his father, who died in 3399	Berosus, ap. Jos. cont. Ap. lib. i.
	4850		561	Evilmerodach, his son, succeeds him; reigns but one year	2Kings xxv. 27—30; Jer. lii. 31—34. Berosus, ap. Jos. cont. Ap. lib. i. et Euseb. Præp. lib. ix.
3445	4853	555	558	Belshazzar, his son, succeeds him.	
				Daniel's vision of the four animals	Dan. vii.
3446	4860	554	551	Cyrus begins to appear; he liberates the Persians, and takes the title of king.	
3448	4858	552	553	Belshazzar's impious feast. His death	—— v. 1—30.
3449		551		Darius the Mede succeeds Belshazzar	—— — 31.
				Daniel's prophecy of seventy weeks	—— ix.
3450		550		Darius decrees that supplication should be made to no other god but himself	—— vi. 1—9.
				Daniel cast into the lion's den	—— — 10—24.
				Cyrus meditates the destruction of the empire of the Medes and Chaldeans; begins with the Medes; having overcome Astyages, king of the Medes, his uncle by the mother's side, he gives him the government of Hyrcania.	
3455	4863	545	548	Cyrus marches against Darius the Mede, his uncle; but first wars against the allies of his uncle Darius; particularly agianst Crœsus, king of Lydia	Herod. lib. i. Cyrop. vi.
3456	4875	544	536	He attempts Babylon, and takes it	—— —— vii.
3457		543		He sets the Jews at liberty, and permits their return into Judea. The first year of his reign over all the East	2Chr. xxxvi. 22, 23; Ezra i. Xen. Cyrop. lib. viii.
				The history of Bel and the Dragon	Apocrypha.
3458		542		The Jews, returning from captivity, renew the sacrifices in the temple	Ezra ii. 1—iii. 7.
3475	4882	525	529	Cyrus dies, aged seventy years	Cyropedia, lib. viii.
				Cambyses succeeds him. The Cushites, or Samaritans, obtain a prohibition, forbidding the Jews to continue the building of their temple	Ezra. iv. 6—24. Ptol. Can.
3478	4886	522	525	Cambyses wars in Egypt, five years	Her. ii. iii. Just. i. c. 9.
3480		520		Cambyses kills his brother Smerdis.	
3483		517		He dies	Herod. lib. iii.
	4948		463	The seven Magi usurp the empire. Artaxata, one of them, forbids the building of the temple	1 Esdras v. 73.
				Seven chiefs of the Persians slay the Magi	Herod. iii. Just. i. c. 10.
				Darius, son of Hystaspes, otherwise Ahasuerus, acknowledged king of the Persians. Marries Atossa, the daughter of Cyrus	
3484		516		Haggai begins to prophesy; reproaches the Jews for not building the house of the Lord	Haggai.
3485		515		The Jews re-commence building the temple	Ezra vi. 6—14.
				About this time Zechariah begins to prophesy	Zech. i. 1.
				Here, properly, end the seventy years of captivity, foretold by Jeremiah, which began A. M. 3146.	

Year of the World. Calmet.	Year of the World. Hales.	Year before Christ. Calmet.	Year before Christ. Hales.		
3487	4948	513	463	The feast of Darius, or Ahasuerus; he divorces Vashti.	Esth. 1.
3488	4951	512	460	He espouses Esther	—— ii. 1—18.
3489	4895	511	516	The dedication of the temple of Jerusalem, rebuilt by Zerubbabel	Ezra vi. 15—22.
3495		505		The beginning of the fortune of Haman	Esth. iii. 1, 2.
				He vows the destruction of the Jews, and procures from Ahasuerus an order for their extermination	—— — 3—15.
3496		504		Esther obtains a revocation of this decree. Haman hung on the gallows he had prepared for Mordecai.	—— iv.—vii.
				The Jews punish their enemies at Shushan, and throughout the Persian empire	—— ix. 1—16; Jos. Ant. lib. xi. c. 6.
3519	4926	481	485	Darius, or Ahasuerus, dies; Xerxes succeeds him	Ptol. in Canone; Africanus; Euseb. & c.
3531	4947	469	464	Xerxes dies; Artaxerxes succeeds him	Diod. Sic. lib. xi. Justin, lib. iii. c. 1.
3537	4954	463	457	He sends Ezra to Jerusalem, with several priests and Levites, the seventh year of Artaxerxes	Ezra vii. 1, 7, 8.
3538		462		Ezra reforms abuses among the Jews, especially as to their strange wives	—— ix. x.
3550	4967	450	444	Nehemiah obtains leave of Artaxerxes to visit Jerusalem, and to rebuild its gates and walls	Neh. i.—ii. 12.
				The walls rebuilt	—— ii. 13—vi. 19.
				Dedication of the walls of Jerusalem	—— xii. 27—43.
				Nehemiah prevails with several families in the country to dwell in Jerusalem	—— xi.
3551		449		The Israelites put away their strange wives	—— ix. 2.
				Nehemiah renews the covenant of Israel with the Lord	—— viii.—x.
3563	4979	437	432	Nehemiah returns to king Artaxerxes	—— vii. 1—4; xiii. 6; Prid.
3565	4987	435	424	Nehemiah comes a second time into Judea, and reforms abuses	—— xiii. 7.
				Zechariah prophesies under his government; also Malachi, whom several have confounded with Ezra.	
3580	4991	420	420	Nehemiah dies.	
	4998		413	Eliashib, the high-priest, who lived under Nehemiah,	
	5038		373	is succeeded by Joiada, who is succeeded by Jonathan, who is killed in the temple by Jesus his	
	5070		341	brother: the successor of Jonathan is Jaddus, or Jaddua. The exact years of the death of these high-priests are not known	Jos. Ant. lib. xi. c. 7; Chron. Alexand.
3654		346		Artaxerxes Ochus sends several Jews into Hyrcania, whom he had taken captive in Egypt	Diod. Sic. lib. xvi. Jos. cont. Ap. lib. i.
3671		329		Alexander the Great enters Asia	Plut. in Alex. Arrian, i. Diod. Sic. lib. xxii.
3672		328		He besieges Tyre; demands of the high-priest Jaddus the succors usually sent to the king of Persia; Jaddus refuses	Jos. Ant. lib. xi. c. 8.
				Alexander approaches Jersualem, shows respect to the high-priest, is favorable to the Jews; grants them an exemption from tribute every sabbatical year.	
				The Samaritans obtain Alexander's permission to build a temple on mount Gerizim.	
3673		327		Alexander conquers Egypt; returns into Phœnicia; chastises the Samaritans, who had killed Andromachus, his governor; gives the Jews part of their country	Q. Curt. lib. iv. c. 8; Euseb. Chron. p. 177. Cedrenus; Jos. cont. Ap. lib. ii.
3674		326		Darius Codomannus dies, the last king of the Persians.	
3681		319		Alexander the Great dies, first monarch of the Grecians in the East	Plut. in Alexand. Q. Curt. lib. x. c. 5; Diod. Sic. lib. xvii.
				Judea in the division of the kings of Syria.	
3684		316		Ptolemy, son of Lagus, conquers it; carries many Jews into Egypt	Jos. Ant. lib. xii. c. 7. Arist. Diod. lib. xviii.

Year of the World		Year before Christ.			
Calmet.	Hales.	Calmet.	Hales.		
3690	5070	310	341	Antigonus retakes Judea from Ptolemy	Plut. in Demet.
3692		308		Ptolemy, son of Lagus, conquers Demetrius, son of Antigonus, near Gaza; becomes again master of Judea	Diod. Sic. lib. xix. App. in Syriacis.
				Judea returns to the jurisdiction of the kings of Syria; the Jews pay them tribute some time. Judea is in subjection to the kings of Egypt under the reign of Ptolemy Philadelphus, if what we read concerning the version of the Septuagint be true.	
3727		273		The Septuagint version supposed to be really made about this time.	
3743		257		Antiochus Theos, king of Syria, begins to reign; grants to the Jews the privileges of free denizens throughout his dominions.	
3758		242		Ptolemy Euergetes makes himself master of Syria and Judea.	
	5090		321	The high-priest Jaddus dying in 3682, Onias I. succeeds him, whose successor is Simon the Just, in	
	5111		300	3702. He, dying in 3711, leaves his son Onias II.	
	5120		291	a child; his father's brother, Elezaer, discharges the office of high-priest about thirty years. Under the priesthood of Eleazar the version of the Septuagint is said to be made. After the death of Eleazar in	
				3744, Manasseh, great uncle of Onias, and brother	Jos. Ant. lib. xii. c. 2;
	5135		276	of Jaddus, is invested with the priesthood	Euseb. in Chron.
3771	5161	229	250	Manasseh dying this year, Onias II. possesses the high-priesthood. Incurs the indignation of the king of Egypt, for not paying his tribute of twenty talents; his nephew Joseph gains the king's favor, and farms the tributes of Cœlo-Syria, Phœnicia, Samaria and Judea	Jos. Ant. lib. xii. c. 3.
3783		217		Ptolemy Euergetes, king of Egypt, dies; Ptolemy Philopator succeeds him	Polyb. lib. ii. p. 155; Justin, lib. xxix. c. 1. Euseb. in Chron.
3785	5194	215	217	Onias II. high-priest, dies; Simon II. succeeds him.	
3786		214		Antiochus the Great wars against Ptolemy Philopator	Polyb. lib. v.; Justin, lib. xxx. c. 1.
3787		213		Ptolemy Philopator defeats Antiochus at Raphia in Syria	Polyb. lib. v.
				Ptolemy attempts to enter the temple of Jersulem; is hindered by the priests. He returns into Egypt; condemns the Jews in his dominions to be trod to death by elephants. God gives his people a miraculous deliverance	3 Mac. i. ii. Jos. Ant. lib. xii. c. 4. Euseb. in Chron. Chron. Alexand.
3788		212		The Egyptians rebel against their king Ptolemy Philopator; the Jews take his part	Polyb. lib. v.
3800		200		Ptolemy Philopator dies; Ptolemy Epiphanes, an infant, succeeds him	Justin, lib. xx. c. 1, 2. Ptol. in Canone; Euseb. &c.
3802		198		Antiochus the Great conquers Phœnicia and Judea	Polyb. lib. v.
3805	5216	195	195	Simon II. high-priest, dies; Onias III. succeeds him.	
3806		194		Scopas, a general of Ptolemy Epiphanes, retakes Judea from Antiochus	Jos. Ant. lib. xii. c. 3.
3807		193		Antiochus defeats Scopas; is received by the Jews into Jerusalem	Polyb. lib. xvi. Jos. Ant. lib. xii. c. 3.
				Arius, king of Lacedemon, writes to Onias III. and acknowledges the kindred of the Jews and Lacedemonians. The year uncertain. Perhaps it was rather Onias I.	
3812		188		Antiochus the Great gives his daughter Cleopatra in marriage to Ptolemy Epiphanes, king of Egypt; and as a dowry, Cœlo-Syria, Phœnicia, Judea and Samaria	Jos. Ant. lib. xii. c. 3.
3815		185		Antiochus declaring war against the Romans is	

THE FLIGHT INTO EGYPT.

Year of the World.		Year before Christ.			
Calmet.	Hales.	Calmet.	Hales.		
				overcome, and loses great part of his dominions.	
				He preserves Syria and Judea	Justin, lib.xxxi. c. 6—8.
3817	5216	183	195	Antiochus dies; leaves Seleucus Philopator his successor. Antiochus, his other son surnamed afterwards Epiphanes, at Rome as a hostage	——— xxxii. c. 2; Strabo, lib. xvi. App. in Syriacis.
3828		172		Heliodorus, by order of Seleucus, attempts to rifle the treasury of the temple at Jerusalem. Is prevented by an angel.	
				Onias III. goes to Antioch, to vindicate himself against calumnies.	
				Seleucus sends his son Demetrius to Rome, to replace his brother Antiochus, who had been a hostage there fourteen years.	
				Antiochus journeying to return into Syria, Seleucus is put to death by the machinations of Heliodorus, who intends to usurp the kingdom.	
				Antiochus, at his arrival, is received by the Syrians as a tutelar deity, and receives the name of Epiphanes.	
3829	5236	171	175	Jason, son of Simon II., high-priest, and brother of Onias III., now high-priest, buys the high-priesthood of Antiochus Epiphanes	2Mac.iv.7, Jos.de Mac. c. 4.
				Several Jews renounce Judaism, for the religion and ceremonies of the Greeks.	
3831		169		Antiochus Epiphanes intends war against Ptolemy Philometor, king of Egypt. Is received with great honor in Jerusalem.	
3834	5239	166	172	Menelaus offers three hundred talents of silver for the high-priesthood more than what Jason had given for it; he obtains a grant of it from Antiochus	——— — 23—28
				Menelaus, not paying his purchase-money, is deprived of the high-priesthood: Lysimachus, his brother, is ordered to perform the functions of it.	
				Menelaus, gaining Andronicus, governor of Antioch, in the absence of Antiochus Epiphanes, causes Onias III. the high-priest, to be killed	——— — 34.
				Lysimachus, thinking to plunder the treasury of the temple at Jerusalem, is put to death in the temple	——— — 40—42.
				Antiochus preparing to make war in Egypt. Prodigies seen in the air over Jerusalem	——— v. 1—3.
				A report that Antiochus Epiphanes was dead, in Egypt; Jason attempts Jerusalem, but is repulsed	——— — 5, 6; Jos.Ant. l. xii. c. 8.
				Antiochus, being informed that some Jews had rejoiced at the false news of his death, plunders Jerusalem, and slays 80,000 men	——— — 11; Diod.Sic. lib. xxxiv.
3836		164		Appollonius sent into Judea by Antiochus Epiphanes. He demolishes the walls of Jerusalem, and oppresses the people. He builds a citadel on the mountain near the temple, where formerly stood the city of David	——— — 24—26; 1 Mac. i. 30—40; Jos. Ant. l. xxii. c. 7.
				Judas Maccabæus, with nine others, retires into the wilderness.	2 Mac. v. 27.
3837		163		Antiochus Ephiphanes publishes an edict, to constrain all the people of his dominions to uniformity with the religion of the Grecians.	
				The sacrifices of the temple interrupted; the statue of Jupiter Olympus set up on the altar of burnt-sacrifices	Jos. Ant. l. xxii. c. 7.
				The martyrdom of old Eleazar at Antioch; of the seven brethren Maccabees, and their mother	2 Mac. vi. vii. Jos. de Maccab
				Mattathias and his seven sons retire into the mountains; the Assideans join them	1 Mac. ii. 27—30. Jos. Ant. lib. xii. c 8.
				About this time flourishes Jesus, son of Sirach, author of the book of Ecclesiasticus.	
3838	5248	162	163	Mattathias dies	——— — 70.

Year of the World.		Year before Christ.			
Calmet.	Hales.	Calmet.	Hales.		
3838	5248	162	163	Is succeeded by Judas Maccabæus. Judas defeats Appollonius, and afterwards Seron	1 Mac. iii. 1, 13, 14; 2 Mac. viii. 1; Jos. Ant. lib. xii. c. 9.
3839		161		Antiochus Epiphanes, wanting money to pay the Romans, goes to Persia. Nicanor and Gorgias, and Ptolemy, son of Dorymenes, enter Judea at the head of their armies	——— —42, &c. 2 Mac. vii. 34, &c. Jos. Ant. lib. xii. c. 11.
				Judas Maccabæus defeats Nicanor. Gorgias declines a battle against Judas.	
3840		160		Lysias, coming into Judea with an army, is beaten, and forced to return to Antioch.	
				Judas purifies the temple, after three years' defilement by the Gentiles. This is called Encœnia	——— iv. 36, &c. 2 Mac. x. 1, &c. Jos. Ant. lib. xii. c. 11.
				Timotheus and Bacchides, generals of the Syrian army, are beaten by Judas.	
				Antiochus Epiphanes dies in Persia. His son, Antiochus Eupator, aged nine years, succeeds him; under the regency of Lysias	Appian, in Syriacis; Euseb. in Chron. Jos. Ant. lib. xii. c. 14; 1 Mac. vi. 17; 2 Mac. ix. 29; x. 10, 11.
				Judas wars against the enemies of his nation in Idumea, and beyond Jordan	1 Mac. v. 1, &c. 2 Mac. x. 14, 15, &c.
				Timotheus, a second time, overcome by Judas	2 Mac. x. 24—38.
3841		159		The people beyond Jordan and in Galilee conspire against the Jews. Are supported by Judas and his brethren.	
				Lysias, coming into Judea, forced to make peace with Judas; returns to Antioch	——— xi. 1—15.
				A letter of king Antiochus Eupator, in favor of the Jews.	
				The Roman legates write to the Jews, and promise to support their interests with the king of Syria.	
				The treachery of Joppa and Samaria chastised by Judas.	
				Judas wars beyond Jordan. Defeats a general of the Syrian troops, called Timotheus, different from the former Timotheus	2 Mac. xii. 10, &c.
				Judas attacks Gorgias in Idumea; having defeated him, finds Jews, killed in the fight, had concealed gold under their clothes, which they had taken from an idol's temple at Jamnia	1 Mac. v. 65, &c.
				Antiochus Eupator invades Judea in person; besieges Bethshur, and takes it; besieges Jerusalem	——— vi. 48—54.
				Philip, who had been appointed regent by Antiochus Epiphanes, coming to Antioch, Lysias prevails with the king to make peace with the Jews, and to return to Antioch. But before he returns, he enters Jerusalem, and causes the wall to be demolished that Judas had built to secure the temple from the insults of the citadel	——— —55–62; 2 Mac. xiii. 23.
3842		158		Menelaus, the high-priest, dies; is succeeded by Alcimus, an intruder	2 Mac. xiv. 3; Jos. Ant. lib. xii. c. 15. lib. xx. c. 8.
				Onias IV. son of Onias III. lawful heir to the dignity of high-priest, retires into Egypt, where, some time after, he builds the temple Onion.	
				Demetrius, son of Seleucus, sent to Rome as a hostage; escapes from thence, comes into Syria where he slays his nephew Eupator, also Lysias, regent of the kingdom, and is acknowledged king of Syria	1 Mac. vii. 1—4, 2 Mac. xiv. 1, 2; Jos. Ant. lib. xii. c. 16; Appian in Syriacis; Just. lib. xxxiv. c. 3.

Year of the World.		Year before Christ.		FROM THE CREATION TO THE BIRTH OF CHRIST.	
Cal-met.	Hales.	Cal-met.	Hales.		
3842	5248	158	163	Alcimus intercedes with Demetrius for the confirmation of the dignity of high-priest, which he had received from Eupator	1 Mac. vii. 5—9.
3843		157		Alcimus returns into Judea with Bacchides, and enters Jerusalem	——— —— 10, &c.
				Is driven from thence, and returns to Demetrius, who appoints Nicanor, with troops, to take him back to Judea. Nicanor makes an accommodation with Judas, and lives for some time on good terms with him	——— — 26—29.
				Alcimus accuses Nicanor of betraying the king's interests. Demetrius orders Nicanor to bring Judas to him	——— — 27—32; 2 Mac. xiv. 26–29; Jos. Ant. l.xii.c.17.
				Judas attacks Nicanor, and kills about 5000 men	2 Mac. xv. 27.
				Death of Rhazis, a famous old man, who chooses rather to die by his own hand, than to fall alive into the power of Nicanor	——— xiv. 37—46.
				Judas obtains a complete victory, in which Nicanor is killed	——— xv. 27, &c.
				Bacchides and Alcimus again sent into Judea	1 Mac. ix. 1, &c. Jos. Ant. lib. xii. c. 19.
				Judas gives them battle; dies like a hero, on a heap of enemies slain by him	——— — 5—21; Jos. Ant. lib. xii. c. 19.
	5251		160	Jonathan Maccabæus chosen chief of his nation, and high-priest, in the place of Judas	——— — 28, &c. Jos. Ant. lib. xiii. c. 1.
				The envoys return, which Judas has sent to Rome, to make an alliance with the Romans.	
				Bacchides pursues Jonathan; he, after a slight combat, swims over the Jordan in sight of the enemy	——— — 43, &c. Jos. Ant. lib. xiii. c. 1.
3844		156		Alcimus dies	——— — 54.
3846		154		Jonathan and Simon Maccabæus are besieged in Bethbessen, or Beth-agla. Jonathan goes out of the place, raises soldiers, and defeats several bodies of the enemy	——— — 62, &c. Jos. Ant. lib. xiii. c. 1.
				Simon, his brother, makes several sallies, and opposes Bacchides.	
				Jonathan makes proposals of peace to Bacchides, which are accepted	——— — 70; Jos. Ant. lib. xiii. c. 2.
				Jonathan fixes his abode at Mikmash, where he judges the people	——— — 73.
3851		149		Alexander Balas, natural son of Antiochus Epiphanes, comes into Syria to be acknowledged king.	——— x. 1; Jos. Ant. lib. xiii. c. 3.
3852		148		Demetrius Soter, king of Syria, writes to Jonathan, asks soldiers against Alexander Balas. Balas also writes to Jonathan, with offers of friendship, and the dignity of high-priest	——— — 3—9, 15—20; Jos. Ant. 1. xiii. c. 5.
	5258		153	Jonathan assists Balas, puts on the purple, and performs the functions of high-priest, for the first time at Jerusalem, which he makes his ordinary residence. In the year of the Greeks 160	——— — 21, &c.
				Demetrius's second letter to Jonathan	——— — 24—45.
3854		146		Demetrius Soter dies; Alexander Balas is acknowledged king of Syria	——— — 50; Justin, lib. xxxv. c. 1; Polyb. lib. iii. p. 161; Jos. Ant. lib. xiii. c. 5.
				Onias IV. son of Onias III. builds the temple of Onion in Egypt	Jos. Ant. lib. xii. c. 6; lib. xx. c. 8; Bell. lib. vii. c. 30.
				A dispute between the Jews and Samaritans of Alexandria, concerning their temples. The Samaritans condemned by the king of Egypt, and the temple of Jerusalem preferred to that of Gerizim	——— xiii. c. 6.
				Aristobulus, a peripatetic Jew, flourishes in Egypt, under Ptolemy Philopator.	

Year of the World. Calmet.	Year of the World. Hales.	Year before Christ. Calmet.	Year before Christ. Hales.		
3854	5258	146	158	Demetrius Nicanor, eldest son of Demetrius Soter, comes into Cilicia to recover the kingdom of his father	1 Mac. x. 67; Jos. Ant. l. xiii. c. 8; Justin, l. xxxv. c. 2.
				Apollonius, to whom Alexander Balas has trusted his affairs, revolts to Demetrius Nicanor	Jos. Ant. l. xiii. c. 8.
				He marches against Jonathan Maccabæus, who continues in the interest of Alexander Balas. Apollonius is put to flight	1 Mac. x. 69—87; Jos. Ant. l. xiii. c. 8.
3858		142		Ptolemy Philometor, king of Egypt, comes into Syria, pretending to assist Alexander Balas, but he really designs to dethrone him	——— xi. 1—5; Jos. Ant. l. xiii. c. 8.
3859		141		Alexander Balas gives battle to Philometor and Demetrius Nicanor. He loses it, and flies to Zabdiel, king of Arabia, and cuts off his head	——— xi. 15—17; Diod. Sic. in Excer. Phot. cod. 244.
				Ptolemy Philometor dies in Syria. Cleopatra, his queen, gives the command of her army to Onias, a Jew, son of Onias III	——— xi. 18; Polyb. in Excer. Val. p. 194. Strab. l. xvi. p. 751.
				Onias restrains Ptolemy Physcon, son of Philometor	Justin, lib. xxxviii. c. 8; Jos. cont. Ap. l. ii.
				Jonathan besieges the fortress of the Syrians at Jerusalem	1 Mac. xi. 20; Jos. Ant. l. xiii. c. 8.
				Demetrius comes into Palestine; Jonathan finds means to gain him by presents	——— —21—29.
3860		140		Demetrius Nicanor attacked by the inhabitants of Antioch, who had revolted. Jonathan sends him soldiers, who deliver him	——— — 43, 44.
				Tryphon brings young Antiochus, son of Alexander Balas, out of Arabia, and has him acknowledged king of Syria. Jonathan espouses his interests against Demetrius Nicanor	——— —54—60; Jos. Ant. l. xiii, c. 9.
				Jonathan renews the alliance with the Romans and Lacedemonians	——— xii. 1—23; Jos. Ant. l. xiii. c. 9.
				He is treacherously taken by Tryphon in Ptolemais, who some time afterwards puts him to death	——— — 39—53.
3861	5268	139	143	Simon Maccabæus succeeds Jonathan	——— xiii. 1—9.
				Tryphon slays the young king Antiochus Theos, and usurps the kingdom of Syria	Diod. Sic. Legat. 31.
				Simon acknowledges Demetrius Nicanor, who had been dispossessed of the kingdom of Syria, and obtains from him the entire freedom of the Jews	1 Mac. xii. 34—42; xiv. 38—41; Jos. Ant. l. xiii. c. 11.
3862		138		The Syrian troops, that held the citadel of Jerusalem, capitulate	——— xiii. 49—52.
				Demetrius Nicator, or Nicanor, goes into Persia with an army; is taken by the king of Persia	——— xiv. 1—3; Justin, l. xxxvi. c. 1; Jos. Ant. xiii. c 9, 12; Orosius, lib. v. c. 4.
				Simon acknowledged high-priest, and chief of the Jews, in a great assembly at Jerusalem	——— — 26—49.
3864		136		Antiochus Sidetes, brother of Demetrius Nicanor, becomes king of Syria; allows Simon to coin money, and confirms all the privileges the Syrian kings had granted to the Jews	——— xv. 1, &c.
3865		135		Return of the ambassadors Simon had sent to Rome, to renew his alliance with the Romans	——— — 15.
3866		134		Antiochus Sidetes quarrels with Simon, and sends Cendebeus into Palestine, to ravage the country	——— — 26—38.
				Cendebeus is beaten by John and Judas, Simon's sons.	——— — 38—40.
3869		131		Simon killed by treachery, with two of his sons, by Ptolemy, his son-in-law, in the castle of Docus	——— xvi. 14—18; Jos. Ant. l. xiii. c. 14.
3870	5275	130	136	Hyrcanus, or John Hyrcanus, succeeds his father, Simon.	
				Antiochus Sidetes besieges Hyrcanus in Jerusalem	——— — 20—24; Jos. Ant. l. xiii. c. 14.
				Hyrcanus obtains a truce of eight days to celebrate	

Year of the World. Cal-met.	Year of the World. Hales.	Year before Christ. Cal-met.	Year before Christ. Hales.		
3870	5275	130	136	the feast of Tabernacles. Makes peace with Antiochus	Jos. Ant. lib. xiii. c. 16; Diod.Sic.xxxiv.p.901.
				Hyrcanus finds money in David's tomb; or rather the hidden treasures of the kings of Judah	Jos. Ant. lib. xiii. c. 16.
3873		127		Antiochus Sidetes goes to war against the Persians; Hyrcanus accompanies him. Antiochus is conquered and slain	Justin, l. xxxviii. c. 10.
3874		126		Hyrcanus shakes off the yoke of the kings of Syria, sets himself at perfect liberty, and takes several cities from Syria	Jos. Ant. lib. xiii. c. 17; Strabo, lib. xvi. p. 76.
3875		125		He attacks the Idumeans, and obliges them to receive circumcision	——— xv. c. 11; Strabo, l. xvi. p. 760.
3877		123		He sends ambassadors to Rome, to renew his alliance with the Roman power	——— xiii. c. 17.
				While the two kings of Syria, both of them called Antiochus, war against each other, Hyrcanus strengthens himself in his new monarchy	
3894		106		He besieges Samaria; takes it after a year's siege	——— c. 18.
3895		105		Hyrcanus dies, after a reign of twenty-nine years	Euseb. in Chron.
3898		102		Under his government is placed the beginning of the three principal Jewish sects, the Pharisees, the Sadducees and the Essenians, but their exact epochs are not known.	
	5305		106	Judas, otherwise called Aristobulus, or Philellen, succeeds John Hyrcanus, associates his brother Antigonus with him in the government, leaves his other brethern and mother in bonds. Lets his mother starve in prison; takes the diadem and title of king. Reigns one year	Jos. Ant. lib. xiii. c. 19; de Bell. lib. i. c. 3.
				He declares war against the Itureans. Antigonus, his brother, beats them, and obliges them to be circumcised	
				Antigonus slain at his return from this expedition, by order of his brother Aristobulus	Jos. ubi sup.
3899	5306	101	105	Aristobulus dies, after reigning one year. Alexander Jannæus, his brother, succeeds him; reigns twenty-six years. He attempts Ptolemais, but hearing that Ptolemy Lathurus was coming to relieve the city, he raises the siege, and wastes the country	——— ——— c. 20.
3900		100		Ptolemy Lathurus obtains a great victory over Alexander, king of the Jews	——— c. 20, 21.
3901		99		Cleopatra, queen of Egypt, fearing that Lathurus should give her disturbance in Egypt, sends the Jews Helcias and Ananias, against him, with a powerful army. She takes Ptolemais	——— c. 21.
3902		98		Alexander Jannæus, king of the Jews, makes an alliance with Cleopatra, and takes some places in Palestine	
3906		94		Attacks Gaza, takes it, and demolishes it.	
3907		93		The Jews revolt against him, but he subdues them.	
				He wages several wars abroad with success.	
				His subjects war against him during six years, and invite to their assistance Demetrius Eucerus, king of Syria	——— c. 22.
				Alexander loses the battle, but the consideration of his misfortunes reconciles his subjects to him.	
				Demetrius Eucerus obliged to retire into Syria. The years of these events are not well known.	
3919		81		Antiochus Dionysius, king of Syria, invades Judea; attacks the Arabians, but is beaten and slain. Aretas, king of the Arabians, attacks Alexander; having overcome him, treats with him, and retires.	

Year of the World. Calmet.	Year of the World. Hales.	Year before Christ. Calmet.	Year before Christ. Hales.		
3920	5306	80	105	Alexander Jannæus takes the cities of Dion, Gerasa, Gaulon, Seleuci, &c.	
3926		74		Alexander Jannæus dies, aged forty-nine years	Jos. Ant. lib. xiii. c. 23.
	5333		78	Alexandra, otherwise Salome, or Salina, his queen, succeeds him; gains the Pharisees to her party, by giving them great power. Reigns nine years.	
3933		67		Aristobulus II. son of Alexander Jannæus, heads the old soldiers of his father; is discontented with the government of his mother and the Pharisees	——— ——— 24.
3934		66		Takes possession of the chief places of Judea, during his mother's sickness	——— ———
3935	5342	65	69	Alexandra dies. Hyrcanus, her eldest son, and brother of Aristobulus, is acknowledged king. Reigns peaceably two years.	
3935				Battle between Hyrcanus and Aristobulus; Hyrcanus is overcome at Jericho. Hyrcanus had been high-priest under the reign of his mother nine years; then is king and pontiff two years; is afterwards only priest nineteen years; after which he is ethnarch four years. At last, he is Herod's captive and sport eight years. So that he survived his father, Alexander Jannæus, forty-eight years	——— lib. xiv. c. 1;
3938		62		Peace concluded between the brothers, on condition that Hyrcanus should live private, in the enjoyment of his estate, and Aristobulus be acknowledged high-priest and king. Thus Hyrcanus, having reigned three years and three months, resigns	Bel. lib. i. c. 4.
	4342		69	the kingdom to Aristobulus II. who reigns three years and three months	Jos. ubi sup.
3939		61		Hyrcanus, at the instigation of Antipater, seeks protection from Aretas, king of the Arabians.	
				Aretas, king of the Arabians, undertakes to replace Hyrcanus on the throne	——c. 3; Del. lib. i. 5.
				Aristobulus is worsted, and forced to shut himself up in the temple at Jerusalem.	
				He sends deputations, first to Gabinius, and then to Scaurus, who were sent by Pompey into Syria; offers them great sums of money to engage on his side, and to oblige Aretas to raise the siege of the temple	—— c. 4. ———
				Scaurus writes to Aretas, and threatens to declare him an enemy to the Roman people, if he does not retire.	
				Arestas withdraws his forces; Aristobulus pursues him, gives him battle, and obtains a victory over him.	
3940		60		Pompey comes to Damascus, and orders Aristobulus and Hyrcanus to appear before him. Hears the cause of the two brothers, and advises them to live in good understanding with each other	—— c. 5. ———
3941	5348	59	63	Aristobulus withdraws into Jerusalem, and maintains the city against Pompey, who besieges it. The city and temple taken. Aristobulus taken prisoner. Hyrcanus made high-priest and prince of the Jews, but not allowed to wear the diadem. Judea reduced to its ancient limits, and obliged to pay tribute to the Romans	—— c. 5—7. ——— Strab. lib. xvi. p. 762.
				Alexander, son of Aristobulus, having escaped from the custody of those who were carrying him to Rome, comes into Judea, and raises soldiers	Jos. Ant. lib. xiii. c. 10; Bel. lib. i. c. 6.
				End of the kingdom of Syria.	
				Augustus, afterwards emperor, is born.	
3947		53		Gabinius, a Roman commander, beats Alexander, and besieges him in the castle of Alexandrion. Alexander surrenders, with all his strong places.	

Year of the World.		Year before Christ			
Calmet.	Hales.	Calmet.	Hales.		
3948	5348	52	63	Aristobulus, escaping from Rome, returns into Judea, and endeavors to repair the castle of Alexandrion. Is hindered by the Romans, who disperse his little army. He flees to Machæron, determining to fortify it, but is presently besieged in it. After some resistance, is taken, and sent a second time prisoner to Rome	Jos. Ant. lib. xiv. c. 11; Bel. lib. i. c. 6.
3949		51		Ptolemy Auletes, king of Egypt, by money, induces Gabinius to come into Egypt, to restore him to the throne. John Hyrcanus furnishes Gabinius with provisions for his army, and writes to the Jews, in Pelusium, to favor the passage of the Romans	Dion. Cas. lib. xxxix; Plutarch in Anton. Jos. Ant. l. xiv. c. 11
				While Gabinius is busy in Egypt, Alexander, son of Aristobulus, wastes Judea. Gabinius defeats him at the foot of Mount Tabor	Jos. ubi sup.
				Crassus succeeds Gabinius in the government of Syria	Dion. Cas. lib. xxxix.
3950		50		Crassus, passing into Syria, and finding the province quiet, makes war against the Parthians.	
3951		49		He comes to Jerusalem, and takes great riches out of the temple	Jos. Ant. lib. xiv. c. 12.
	5358		53	He marches against the Parthians: is beaten and killed by Orodes	Dion. Cas. lib. xi.
3952		48		Cassius brings the remains of the Roman army over the Euphrates, takes Tirhakah, and brings from thence above 30,000 Jewish captives.	
				He restrains Alexander, son of king Aristobulus.	
				Civil war between Cæsar and Pompey	Plut. in Cæs., etc. Dion. Cas. lib. xli. App. Bel. civ. lib. ii.
3955		45		Julius Cæsar, making himself master of Rome, sets Aristobulus at liberty, and sends him with two legions into Syria.	
				Those of Pompey's party poison Aristobulus.	
				Scipio slays young Alexander, son of Aristobulus.	
				The battle of Pharsalia. Antipater governor of Judea.	
				The library of Alexandria burnt.	
3957		43		Antipater, by order of Hyrcanus, joins Mithridates, who was going into Egypt with succors for Cæsar, and assists him in reducing the Egyptians.	
				Cæsar, having finished the war in Egypt, comes into Syria; confirms Hyrcanus in the high-priesthood.	
				Vitruvius, the architect, flourishes.	
	5364		47	Antigonus, son of Aristobulus, remonstrates to Cæsar; but Cæsar is prejudiced against him by Antipater	Jos. Ant. lib. xiv. c. 15; Bel. lib. i. c. 8.
				Antipater takes advantage of the indolence of Hyrcanus; makes his eldest son, Phazael, governor of Jerusalem, and Herod, another of his sons, governor of Galilee	——— c. 17.
3958		42		Herod is summoned to Jerusalem to give an account of his conduct, but, finding himself in danger of being condemned, retires to his government.	
				Hillel and Sameas, two famous rabbins, live about this time. Sameas was master to Hillel. Jonathan, son of Uziel, author of the Chaldee paraphrase, was a disciple of Hillel. Josephus says, that Pollio was master of Sameas. Jerome says, that Akiba succeeded Sameas and Hillel in the school of the Hebrews.	
				Cæsar passes into Africa. Cato kills himself at Utica.	
				Reform of the Roman Calendar, in the year of Rome 708. This year consisted of 445 days	Censorin. c. 20.
3959		41		Hyrcanus sends ambassadors to Julius Cæsar, to re-	

Year of the World. Calmet.	Year of the World. Hales.	Year before Christ. Calmet.	Year before Christ. Hales.		
				new alliance. The alliance renewed in a manner very advantageous to the Jews.	
3960	5364	40	47	After the death of Julius Cæsar, the ambassadors of the Jews are introduced into the senate, and obtain their whole request.	
				The Jews of Asia confirmed in their privilege of not being compelled to serve in the wars.	
3961		39		Cassius demands 700 talents from Judea. Malichus causes Antipater to be poisoned	Jos. Ant. lib. xiv. 18, 19.
				Herod causes Malichus to be killed, to revenge the death of his father Antipater.	
3962		38		Felix, having attacked Phazael, is shut up by him in a tower, whence Phazael would not release him but on composition.	
				The era of Spain, Spain being now subdued to Augustus by Domitius Calvinus.	
				Herod and Phazael tetrarchs of Judea	c. 23.
3963		37		Antigonus II. son of Aristobulus, gathers an army, and enters Judea.	
				Herod gives him battle, and routes him.	
				Mark Antony coming into Bithynia, some Jews resort to him, and accuse Herod and Phazael before him; but Herod, coming thither, wins the affections of Antony	c. 22.
				Mark Antony, being at Ephesus, grants the liberty of their nation to such Jews as had been brought captive by Cassius, and causes the lands to be restored that had been unjustly taken away from the Jews.	
				Mark Antony coming to Antioch, some principal Jews accuse Herod and Phazael, but, instead of hearing them, he establishes the two brothers tetrarchs of the Jews	c. 23.
				The Jews afterwards send a deputation of a thousand of their most considerable men to Antony, then at Tyre; but in vain	
3964		36		Antigonus, son of Aristobulus, prevails with the Parthians to place him on the throne of Judea. The Parthians seize Hyrcanus and Phazael, and deliver them up to Antigonus	c. 24, 25.
	5371		40	Phazael beats out his own brains; the Parthians carry Hyrcanus beyond the Euphrates, after Antigonus had cut off his ears.	
	5374		37	Herod forced to flee to Jerusalem, and thence to Rome, to implore assistance from Antony. He obtains the kingdom of Judea from the senate, and returns with letters from Antony, who orders the governors of Syria to assist in obtaining the kingdom. He reigns thirty-seven years	c. 26.
3965		35		He first takes Joppa, then goes to Massada, where his brother Joseph was besieged by Antigonus	c. 27.
				He raises that siege, and marches against Jerusalem; but, the season being too far advanced, he could not then besiege it	
				He takes the robbers that hid themselves in the caves of Galilee, and slays them.	
				Machera, a Roman captain, and Joseph, Herod's brother, carry on the war against Antigonus, while Herod goes with troops to Antony, then besieging Samosata	
3966		34		After the taking of Samosata, Antony sends Sosius, with Herod, into Judea, to reduce it	
3967		33		After several battles, Herod marches against Jerusalem; the city is taken; Antigonus surrenders himself to Sosius, who insults him.	

Year of the World.		Year before Christ.		FROM THE CREATION TO THE BIRTH OF CHRIST.	
Cal-met.	Hales.	Cal-met.	Hales.		
3967	5374	33	37	Antigonus carried prisoner to Antony, at Antioch, who orders him to be beheaded	Jos. Ant. lib. xiv. c. 27.
				End of the reign of the Asmoneans, which had lasted 126 years.	
				Ananel high-priest the first time	——— xv. c. 2.
3968		32		Hyrcanus is treated kindly by the king of the Parthians. Obtains leave to return into Judea.	
				Because Hyrcanus could no longer exercise the functions of the high-priesthood, Herod bestows that dignity on Ananel	——— c. 2, 3.
3969		31		Alexandra, mother of Mariamne and Aristobulus, obtains of Herod, that Aristobulus might be made high-priest.	
3970		30		Herod causes Aristobulus to be drowned, after he had been high-priest one year.	
				Ananel high-priest the second time	Jos. ubi sup.
				Herod is sent for by Antony to justify himself concerning the murder of Aristobulus	Jos. Ant. lib. xv. c. 4.
				War between Augustus and Mark Antony. Herod sides with Antony.	
3973		27		Herod's wars with the Arabians.	
				A great earthquake in Judea	——— c. 7; Bel. lib. i. c. 14.
				The battle of Actium; Augustus obtains the victory over Antony	Dion. Cas. lib. li. Plut. in Ant., etc.
				Herod seizes Hyrcanus, who attempted to take shelter with the king of the Arabians, and puts him to death.	
3974		26		He goes to Rome to pay his court to Augustus; obtains the confirmation of the kingdom of Judea.	
				Antony and Cleopatra kill themselves.	
				End of the kings of Alexandria, 294 years from the death of Alexander the Great.	
3975		25		Augustus comes into Syria; passes through Palestine; is magnificently entertained by Herod.	
3976		24		Herod puts to death his wife Mariamne, daughter of Alexandra.	
3978		22		Salome, Herod's sister, divorces herself from Costobarus.	
3979		21		Plague and famine rage in Judea.	
3982		18		Herod undertakes several buildings, contrary to the religion of the Jews	Jos. Ant. lib. xv. c. 11.
				He builds Cæsarea of Palestine.	
3983		17		Agrippa, Augustus's favorite, comes into Asia. Herod visits him	——— c. 13.
3984		16		Augustus gives Trachonitis to Herod.	
3985		15		Herod undertakes to rebuild the temple of Jerusalem	——— c. 14.
3988		12		Herod makes a journey to Rome, to recommend himself to Augustus	——— xvi. c. 1
3989		11		He marries his two sons, Alexander and Aristobulus	——— c. 2.
3990		10		Herod comes to meet Agrippa, and engages him to visit Jerusalem.	
3991		9		Domestic divisions in Herod's family. Salome, Pheroras and Antipater at variance with Alexander and Aristobulus	——— c. 6—12.
3993		7		Herod goes to Rome, and accuses his two sons, Alexander and Aristobulus, to Augustus.	
3994		6		The solemn dedication of the city of Cæsarea, built by Herod, in honor of Augustus.	

Year of the World.		Year before Christ.			
Cal-met.	Hales.	Cal-met.	Hales.		
3995	5374	5	37	Augustus continues the Jews of Alexandria in their ancient rights and privileges.	
				Herod, it is said, causes David's tomb to be opened, to take out treasure.	
				New disturbances in Herod's family.	
2996		4		Archelaus, king of Cappadocia, reconciles his son-in-law, Alexander, to his father, Herod.	
				Archelaus goes to Rome with Herod.	
3997		3		Herod makes war in Arabia.	
3998		2		Herod is accused to Augustus of killing several Arabs.	Jos. Ant. lib. xvi. c. 15.
				An angel appears to the priest Zacharias. The conception of John the Baptist. September 24th.....	Luke i. 9—20.
3999		1		Annunciation of the Incarnation of the Son of God, to the Virgin Mary. March 25th.....	—— — 26—38.
				Herod condemns and slays his two sons Alexander and Aristobulus.....	Jos. Ant. l. xvi. c. 17.
				Antipater, son of Herod, aims at the kingdom.....	———— l. xvii. c. 1.
				Herod sends Antipater to Rome.	
				The artifices and tricks of Antipater are discovered..	
	5406		5	Birth of John the Baptist, six months before the birth of Jesus, June 24th.....	Luke i. 57—80.

Year of World	Before Christ	Before A.D.	Year of Christ	FROM THE BIRTH OF CHRIST TO THE DESTRUCTION OF JERUSALEM.	
Calmet.	Hales	Calmet.			
4000	5	4	1	The birth of our Lord and Saviour Jesus Christ, December 25th	Luke ii. 7.
4001		3		Circumcision of Jesus, January 1	—— — 21.
				Antipater returns from Rome. Is accused and convicted of a design to poison Herod	Jos. Ant. l. xvii. c. 7, 9; Bel. lib. i. c. 20, 21.
				Wise men come to worship Jesus	Matt. ii. 1—12.
				Purification of the Virgin Mary; Jesus presented in the temple, forty days after his birth, Feb. 2d	Luke ii. 22—38.
				Flight into Egypt	Matt. ii. 13—15.
				Massacre of the innocents at Bethlehem	—— — 16, 17.
				Antipater put to death by order of Herod.	
				Herod dies, five days after Antipater	Jos. Ant. l. xvii. c. 8; Euseb. Hist Ec. i. 8.
				Archelaus appointed king of Judea by the will of Herod	Jos. Ant. l. xvii. c. 13; Matt. ii. 22.
				Return of Jesus Christ out of Egypt. He goes to dwell at Nazareth	Matt. ii. 19—23.
				Archelaus goes to Rome, to procure from Augustus the confirmation of Herod's will in his favor.	
				The Jews revolt; Varus keeps them in their duty.	
				Archelaus obtains a part of his father's dominions, with the title of tetrarch, and returns to Judea.	
				An impostor assumes the character of Alexander, son of Herod and Mariamne.	
4002		1	2	Archelaus takes the high-priesthood from Joazar and gives it to Elazar.	
				The Vulgar Era, or Anno Domini; the fourth year of Jesus Christ, the first of which has but eight days.	
	A.D.	A.D.			
4009	7	6	9	Archelaus banished to Vienne in Gaul	Jos. Ant. l. xvii. c. 15.
4010		7	10	Enrolment, or taxation, by Cyrenius in Syria. This was his second enrolment.	
				Revolt of Judas the Gaulonite, chief of the Herodians.	
4012	10	9	12	Jesus Christ, at twelve years of age, visits the temple at Jerusalem; continues there three days, unknown to his parents	Luke ii. 46—48.
4013		10	13	Marcus Ambivius governor of Judea	Jos. Ant. l. xvii. c. 15.
4017		14	17	Death of the Emperor Augustus; reigned fifty-seven years, five months, and four days	Vel. Pat. lib. ii. c. 123; Suet. in Oct. c. 100; Tacitus, l. i. c. 5, 7.
				Tiberius succeeds him; reigns twenty-two years, six months, and twenty-eight days	Jos. Ant. lib. xviii. c. 3. &c.
4023		20	23	Tiberius expels from Italy all who profess the Jewish religion, or practice Egyptian superstitions.	
4031	25	28	31	Pilate sent governor into Judea	
				He attempts to bring the Roman colors and ensigns into Jerusalem, but is opposed by the Jews.	
4032	26	29	32	John the Baptist begins to preach	Matt. iii. l.; Luke iii. 2, 3; John i. 15.
4033	27	30	33	Jesus Christ baptized by John	—— — 13—17; Mark i. 9; Luke iii. 21.
				Jesus goes into the desert	—— iv. 1—11; Mark i. 12; Luke iv. 1.
	28			After forty days, Jesus returns to John. He calls Andrew, Simon, Philip and Nathanael	—— — 12, &c. John i. 35, &c.
				The marriage in Cana, where Jesus changes water into wine	John ii. 1.
				Jesus comes to Capernaum; thence to Jerusalem, where he celebrates the first passover after his baptism, April 15th, this year	Matt. ix.—xii. John ii. 12—25.
				Nicodemus comes to Jesus by night	John iii. 1—21.

Year of World	A.D.	A.D.	Year of Christ	FROM THE BIRTH OF CHRIST TO THE DESTRUCTION OF JERUSALEM.	
Calmet.	Hales.	Calmet.			
4033	28	30	33	Jesus goes to the banks of Jordan, where he baptizes..	John iii. 22.
				Herod Antipas marries Herodias, his brother Philip's wife, Philip being yet living.	
				John the Baptist declares vehemently against this marriage; he is put in prison.....	Matt. xiv. 3—5; Mark vi. 17—20; Luke iii. 19.
				Jesus withdraws into Galilee; converts the Samaritan woman, and several Samaritans.....	John iv. 1—42.
				Preaches at Nazareth, and leaves this city to dwell in Capernaum.....	Luke iv. 16—32.
				Calling of Simon, Andrew, James and John, by Jesus Christ.....	Matt. iv. 18—22; Mark i. 16—20; Luke v. 1—11.
				Jesus Christ works several miracles.....	Mark i. 23—27; ii. 12; Matt. viii. 14—17; Luke iv. 35; v. 25.
				Mathew called..	Matt. ix. 9; Mark ii. 14; Luke v. 27.
4034		31	34	The second passover of our Saviour's public ministry.	
				Our Saviour's sermon on the mount.....	—— v. 1—vii. 29; Luke vi. 20—49.
				John the Baptist, in prison, sends a deputation to Jesus, to inquire if he were the Messiah.....	—— xi. 2—6; Luke vii. 18—23.
4035		32	35	Mission of the apostles into several parts of Judea....	—— x. Mark vi. 7—13; Luke ix. 1–6.
				John the Baptist slain, by order of Herod, at the instigation of Herodias, in the seventeenth year of Tiberius	—— xiv. 1; Mark vi. 14; Luke ix. 7.
				Jesus Christ feeds 5000 men, with five loaves and two fishes.	—— — 15; Mark vi. 35; Luke ix. 12; John vi. 5.
				Jesus Christ's third passover, after his baptism.	
				He passes through Judea and Galilee, teaching and doing miracles	—— ix. 35, Mark iv. 6.
	30			Transfiguration of Jesus Christ	—— xvii. 1; Mark ix. 2; Luke ix. 28.
				Mission of the seventy-two disciples.....	Luke x. 1—16.
				Jesus goes to Jerusalem at the feast of Pentecost.....	John v. 1.
				His relations would have him go to the feast of Tabernacles; he tells them his hour is not yet come; however, he goes thither about the middle of the feast.....	—— vii. 1—39.
4036	31	33	36	At the beginning of the thirty-sixth year of Jesus Christ, Lazarus falls sick, and dies; Jesus comes from beyond Jordan, and restores him to life.....	—— xi. 17—46.
				Jesus retires to Ephraim on Jordan, to avoid the snares and malice of the Jews of Jerusalem.....	—— — 54.
				He comes to Jerusalem, to be present at his last passover.....	Matt. xxi. 1, Mark xi. 1; Luke xix. 29; John xii. 12.
				On Sunday, March 29, of Nisan 9, he arrives at Bethany; sups with Simon the leper.....	John xii. 1—8.
				Monday, March 30, his triumphant entry into Jerusalem.....	Matt. xxi. 8; Mark xi. 8; Luke xix. 36; John xii. 13.
				Tuesday, March 31, he comes again to Jerusalem; on his way curses the barren fig-tree.....	—— xxi. 18, 19; Mark xi. 12—14.
				Wednesday, April 1, the priests and scribes consult on means to apprehend him.....	Mark xi. 18; Luke xix. 47, 48.
				Thursday, April 2; he passeth this day on the mount of Olives; sends Peter and John into the city, to prepare for the passover.....	Matt. xxvi. 17; Mark xiv. 12; Luke xxii. 7.
				Thursday evening, he goes into the city, and eats his last supper with his apostles; institutes the Eucharist. After supper, he retires with them	—— — 20; Mark xiv. 17; Luke xxii. 14; John xiii. 1; Matt

THE ASCENSION OF CHRIST.

Year of World	A.D.	A.D.	Year of Christ	FROM THE BIRTH OF CHRIST TO THE DESTRUCTION OF JERUSALEM.	
Calmet.	Hales.	Calmet.			
4036	31	33	36	into the garden of Gethsemane, where Judas, accompanied by the soldiers, seizes him	xxvi. 30; Mark xiv. 26; Luke xxii. 39; John xviii. 1, 3.
				In the night-time, Jesus is conducted to Annas, father-in-law of the high-priest Caiaphas	Matt. xxvi. 57; Mark xiv. 53; Luke xxii. 54; John xviii. 13.
				Friday, April 3, Nisan 14, he is carried to Pilate, accused, condemned, and crucified on Calvary	——— xxvii. 2, 11—14; Mark xv. 1; Lu. xxiii. 1; John xviii. 28.
				Towards evening, before the repose of the sabbath begins, he is taken down from the cross, embalmed, and laid in a tomb	——— ——— 57; Mark xv. 42; Luke xxiii. 50; John xix. 38.
				The priests set guards about it, and seal up the entry of the sepulchre	——— ——— 66.
				He continues in the tomb all Friday night, all Saturday, (that is, the sabbath,) and Saturday night, till Sunday morning.	
				He rises on Sunday morning	——— xxviii. 2.
				Angels declare his resurrection to the holy women who visit his tomb	John xx. 11.
				Jesus himself appears; 1. to Mary Magdalen, who mistakes him for the gardener; 2. to the holy women, returning from the sepulchre; 3. to Peter; 4. to the two disciples going to Emmaus; 5. to the apostles assembled in an apartment at Jerusalem, excepting Thomas, who was absent: all this on the day of his resurrection	——— — 14. Matt. xxviii. 9; John xx. 18. Luke xxiv. 36. John xx. 19—23.
				Eight days after, in the same place, he again visits his disciples, and convinces Thomas, now present	Mark xvi. 14; John xx. 26.
				The apostles return into Galilee. Jesus shows himself to them on several occasions	Matt. xxviii. 16—18; John xxi. 1.
				The apostles, having passed about twenty-eight days in Galilee, return to Jerusalem.	
				Jesus appears to them while at table, in Jerusalem, May 14. Having taken them out of the city, to the mount of Olives, he ascends into heaven before them all, on the fortieth day after his resurrection	Luke xxiv, 30, 31; Acts i. 9.
	31			Ten days after, being the feast of Pentecost, the Holy Ghost descends upon them in the form of tongues of fire	Acts. ii.
4037		34	37	Seven deacons chosen	——— vi. 1—6.
	34			St. Stephen martyred	——— — 8—vii. 60.
	35			Saul persecutes the church; his conversion	——— viii. 1—ix. 1—19.
				Pilate writes to Tiberius respecting the death of Jesus Christ.	
				James the lesser made bishop of Jerusalem.	
				Philip the deacon baptizes the eunuch of queen Candace	——— — 26—40.
				Dispersion of believers from Jerusalem	——— — 1.
4038		35	38	Agrippa the younger, being much involved in debt in Judea, resolves on going to Rome.	
4039		36	39	He arrives at Rome, and devotes himself to Caius, afterwards emperor.	
4040		37	40	He falls under the displeasure of Tiberius, and is put in prison.	
				Pilate ordered into Italy.	
				Tiberius dies; Caius Caligula succeeds	Seuton. in Calig.
				Agrippa set at liberty, and promoted to honor.	
				Apollonius Tyanæus becomes famous about the end of Tiberius's reign.	
				It is thought that about this time St. Peter comes to Antioch.	
4041		38	41	St. Paul escapes from Damascus, by being let down in a basket	Acts ix. 23—25.

Year of World	A.D	A.D.	Year of Christ	FROM THE BIRTH OF CHRIST TO THE DESTRUCTION OF JERUSALEM.	
Calmet.	Hales.	Calmet.			
4041	35	38	41	He comes to Jerusalem; Barnabas introduces him to the apostles and disciples	Acts. ix. 26—29.
				He goes to Tarsus in Cilicia, his native country	—— — 30.
				Caligula gives Agrippa the tetrarchy of his uncle Philip; he returns into Judea; passing through Alexandria, he is ridiculed by the inhabitants.	
				The citizens of Alexandria make an uproar against the Jews, at the instigation of Flaccus.	
				Pilate kills himself.	
4042		39	42	Flaccus apprehended, and carried to Rome; is banished by order of Caligula.	
				Herod the tetrarch goes to Rome, in hopes of obtaining some favor from the emperor. But Caligula, prepossessed by Agrippa, banishes him to Lyons.	
4043		40	43	Caligula orders Petronius to place his statue in the temple of Jerusalem. The Jews obtain some delay from Petronius.	
				Agrippa endeavors to divert the emperor from this thought, at last, as a great favor, that this statue should not be set up.	
				Philo, the Jew, goes with a deputation from the Jews at Alexandria to Caligula.	
4044		41	44	Philo obtains an audience of the emperor, and runs the hazard of his life.	
				Tumults in Chaldea; the Jews quit Babylon, and retire to Seleucia.	
				About this time, Helena, queen of the Abiabenians, and Izates, her son, embrace Judaism.	
				Caius Caligula dies; Claudius succeeds him. Agrippa persuades him to accept the empire offered by the army. Claudius adds Judea and Samaria to Agrippa's dominions	Sueton. in Claud.
				Agrippa returns to Judea; takes the high-priesthood from Theophilus, son of Ananus; gives it to Simon Cantharus.	
				Soon after, takes this dignity from Cantharus, and gives it to Matthias.	
4045		42	45	Peter comes to Rome in the reign of Claudius. The year not certain.	
4046		43	46	Agrippa deprives the high-priest Matthias of the priesthood; bestows it on Elioneus, son of Citheus.	
4047	44	44	47	Causes the apostle James the greater to be seized, and beheads him	Acts xii. 1, 2; Jos. Ant. lib.xix. c. 8.
				Peter also put into prison by his order, but is liberated by an angel	—— — 3—17.
				Some time afterwards, Agrippa, at Cæsarea, receives a sudden stroke from heaven, and dies in great misery	—— — 21—23.
				Paul and Barnabas go to Jerusalem with the contributions of the believers of Antioch	—— xi. 26—30; xii. 25.
				At their return to Antioch, the church sends them forth to preach to the Gentiles, wherever the Holy Ghost should lead them	—— xiii. 1—3.
4048		45	48	Cuspius Fadus sent into Judea, as governor.	
				A great famine in Judea	Jos. Ant. lib. xx. c. 2.
				Paul and Barnabas go to Cyprus, thence to Pamphylia, Pisidia and Lycaonia. (But see under PAUL.).	Acts xiii. 4—xiv. 10.
				At Lystra, the people prepare sacrifices to them as gods	—— xiv. 11—18.
4049		46	49	They return to Antioch	—— — 19—28.
				The First Epistle of Peter	1st Peter.
				About this time Mark writes his Gospel	Gospel of Mark.
				Cuspius Fadus recalled; the government of Judea given to Tiberius Alexander	Jos. Ant. lib. xx. c. 5.

Year of World	A.D.	A.D.	Year of Christ	FROM THE BIRTH OF CHRIST TO THE DESTRUCTION OF JERUSALEM.	
Calmet.	Hales.	Calmet.			
4051	44	48	51	Herod, king of Chalcis, takes the pontificate from Joseph, son of Camides; gives it to Ananias, son of Nebedeus.	
				Herod, king of Chalcis, dies.	
				Ventidius Cumanus made governor of Judea in place of Tiberius Alexander.	
4052		49	52	Troubles in Judea under the government of Cumanus.	
4054		51	54	Judaizing Christians enforce the law on converted Gentiles	Acts. xv. 1—5.
	49			The council of Jerusalem determines that converted Gentiles should not be bound to an observance of the legal ceremonies	—— — 6—29.
				Peter comes to Antioch, and is reproved by Paul	Gal. ii. 11.
				Paul and Barnabas separate, on account of John Mark	Acts xv. 36—39.
				Timothy adheres to Paul, and receives circumcision	—— xvi. 1—3.
				Luke, at this time, with Paul.	
4055		52	55	Paul passes out of Asia into Macedonia	—— — 9—12.
				Paul comes to Athens	—— xvii. 15—34.
4056		53	56	From Athens he goes to Corinth	—— xviii. 1.
				The Jews expelled Rome under the reign of Claudius	—— xviii. 2.
				Felix sent governor into Judea instead of Cumanus.	
				First Epistle of Paul to the Thessalonians	1st Thessalonians.
				His Second Epistle to the Thessalonians, some months after the First	2d ——————
4057		54	57	Paul leaves Corinth, after a stay of eighteen months; takes ship to go to Jerusalem; visits Ephesus in his way	Acts xviii. 18, 19, 20.
				Apollos arrives at Ephesus; preaches Christ	—— —— 24—26.
				St. Paul, having finished his devotions at Jerusalem, goes to Antioch	—— —— 22.
				Passes into Galatia and Phrygia, and returns to Ephesus, where he continues three years	—— —— 23; xix. 1.
				Claudius, the emperor, dies, being poisoned by Agrippina. Nero succeeds him	Sueton, in Nero.
4058		55	58	Epistle of Paul to the Galatians	Galatians.
4059		56	59	The First Epistle of Paul to the Corinthians	1st Corinthians
4060		57	60	Paul forced to leave Ephesus on account of the uproar raised against him by Demetrius the silversmith	Acts xix. 23—41.
				He goes into Macedonia	—— xx. 1.
				Second Epistle to the Corinthians	2d Corinthians.
4061		58	61	Epistle to the Romans	Romans.
				Paul goes into Judea to carry contributions	Acts xxi. 1—15.
				Is seized in the temple at Jerusalem	—— xxi. 27—xxiii. 10.
4062		59	62	Is sent prisoner to Cæsarea	—— xxiii. 31—35.
				Ishmael, son of Tabei, made high-priest instead of Ananias.	
				Disturbance between the Jews of Cæsarea, and the other inhabitants.	
4063		60	63	Porcius Festus made governor of Judea in the room of Felix	—— xxiv. 27.
				Paul appeals to the emperor. He is put on shipboard, and sent to Rome	—— xxv. 11, 12—xxvii.
				Paul shipwrecked at Malta	—— xxvii.
4064		61	64	He arrives at Rome, and continues there a prisoner two years	—— xxviii. 16—31.
				The Jews build a wall, which hinders Agrippa from looking within the temple.	
				Ishmael, the high-priest, deposed. Joseph, surnamed Cabei, is put in his place.	
4065		62	65	Epistle of Paul to the Philippians	Philippians.
				Epistle to the Colossians	Colossians.

Year of World	A.D	A.D.	Year of Christ		
Calmet.	Hales.	Calmet			
4065	49	62	65	Martyrdom of the apostle James the lesser, bishop of Jerusalem.	
4066		63	66	Epistle of Paul to the Hebrews, written from Italy soon after he was set at liberty	Hebrews.
				Albinus, successor of Festus, arrives in Judea	Jos. Ant. lib. xx. c. 9.
				A division among the priests of Jerusalem on the subject of tithes.	
				The singing Levites obtain leave to wear linen garments in the temple, as well as the priests.	
				Jesus, son of Ananus, begins to cry in Jerusalem, "Wo to the city," &c. and continues so to cry till the siege, by the Romans	Jos. Bel. lib. vi. c. 5.
4067		64	67	Paul comes out of Italy into Judea; passes by Crete Ephesus amd Macedonia.	
				It is thought that from Macedonia he writes his First Epistle to Timothy	1st Timothy
				Paul's Epistle to Titus	Titus.
				Agrippa takes the high-priesthood from Jesus, son of Gamaliel; gives it to Matthias, son of Theophilus	Jos. Ant. lib. xx. c. 9.
				Gessius Florus made governor of Judea in place of Albinus.	
				Nero sets fire to the city of Rome; throws the blame on the Christians, several of whom are cruelly put to death	Tacit. Hist. lib. v.
4068		65	68	Peter writes his Second Epistle, probably from Rome.	2d Peter.
				Several prodigies at Jerusalem this year, during the passover.	
				Paul goes to Rome the last time; is there put into prison; also Peter.	
				Epistle of Paul to th Ephesians	Ephesians.
				Second Epistle of Paul to Timothy	2d Timothy.
				Apollonius Tyanæus comes to Rome.	
4069	65	66	69	The martyrdom of Peter and Paul at Rome	Euseb. Hist. l. iii. c. 1.
				Clement succeeds St. Peter, but does not take upon him the government of the church till after the death of Linus.	
				Mark comes again to Alexandria, and there suffers martyrdom.	
				Cestius, governor of Syria, comes to Jerusalem; enumerates the Jews at the Passover	Jos. Bel. lib. ii. c. 13.
				Disturbances at Cæsarea, and at Jerusalem.	
				Florus puts several Jews to death.	
				The Jews revolt, and kill the Roman garrison at Jerusalem.	
				A massacre of the Jews of Cæsarea in Palestine.	
				All the Jews of Scythopolis slain in one night.	
				Cestius, governor of Syria, comes into Judea.	
				He besieges the temple at Jerusalem; retires, is defeated by the Jews.	
				The Christians of Jerusalem, seeing a war about to break out, retire to Pella, in the kingdom of Agrippa, beyond Jordan	——————c. 25.
				Vespasian appointed by Nero for the Jewish war.	
				Josephus made governor of Galilee.	
				Vespasian sends his son Titus to Alexandria; comes himself to Antioch, and forms a numerous army	
4070		67	70	Vespasian enters Judea; subdues Galilee	———lib. iii. c. 1.
				Josephus besieged in Jotapata.	
				Jotapata taken; Josephus surrenders to Vespasian	———— — c. 8.
				Tiberias and Tarichea, which had revolted against Agrippa, reduced by Vespasian.	
				Divisons in Jerusalem	———— lib. iv. c. 5, 6.
				The Zealots seize the temple, and commit violence in Jerusalem.	

Year of World (Calmet.)	A.D. (Hales.)	A.D. (Calmet.)	Year of Christ (Calmet.)		
4070	65	67	70	They depose Theophilus from being high-priest, and put Phannias in his place. The Zealots send for the Idumeans to succor Jerusalem. They slay Ananus, Jesus, son of Gamala, and Zacharias, son of Baruch. The Idumeans retire from Jerusalem.	
4071		68	71	Nero, the emperor, dies. Galba succeeds him.....	Plut. et Suet. in Galb.
				Vespasian takes all the places of strength in Judea, about Jerusalem. Simon, son of Gioras, ravages Judea, and the south of Idumea.	
4072		69	72	Galba dies; Otho declared emperor.....	Tacit. lib. ii. c. 50.
				Otho dies; Vitellius proclaimed emperor. Vespasian declared emperor by his army; is acknowledged all over the East.....	Jos. Bel. lib. iv. c. 10.
				Josephus set at liberty. John of Gischala heads the Zealots. Eleazar, son of Simon, forms a third party; makes himself master of the inner temple, or the court of the priests.....	——— lib. v. c. 1.
4073		70	73	Titus marches against Jerusalem, to besiege it... ...	——— ——— c. 2.
				Comes down before Jerusalem, some days before the passover. The factions unite at first against the Romans, but afterwards divide again.....	——— ——— c. 7.
				The Romans take the first enclosure of Jerusalem, then the second; they make a wall all round the city, which is reduced to distress by famine. July 17, the perpetual sacrifice ceases. The Romans become masters of the court of the people, in the temple; they set fire to the galleries. A Roman soldier sets the temple on fire; notwithstanding Titus commands the contrary..	——— lib. vi. c. 4.
				The Romans, being now masters of the city and temple, offer sacrifices to their gods. The last enclosure of the city taken.....	——— ——— c. 8.
				John of Gischala, and Simon, son of Gioras, conceal themselves in the common sewers.	
4074	70	71	74	Titus demolishes the temple to its foundations. He also demolishes the city, reserving the towers of Hippicos, Phazael and Mariamne.....	——— lib. vii c. 1.
				Titus returns to Rome, to his father Vespasian; they triumph over Judea. Bassus sent into Judea as lieutenant.	
4075		72	75	After the death of Bassus, Fulvius Sylva succeeds; takes some fortresses that still held out in Judea. The temple Onion, in Egypt, shut up by the Romans. An assassin of Judea seduces the Jews of Cyrene, and causes their destruction.....	——— ——— c. 11.
				Vespasian causes a strict search to be made for all who are of the race of David.	
			95	John exiled to Patmos; his death occurred about 100 A. D. Pliny, proconsul of Bithynia, wrote at this time to Trajan about Christians.	

TABLES

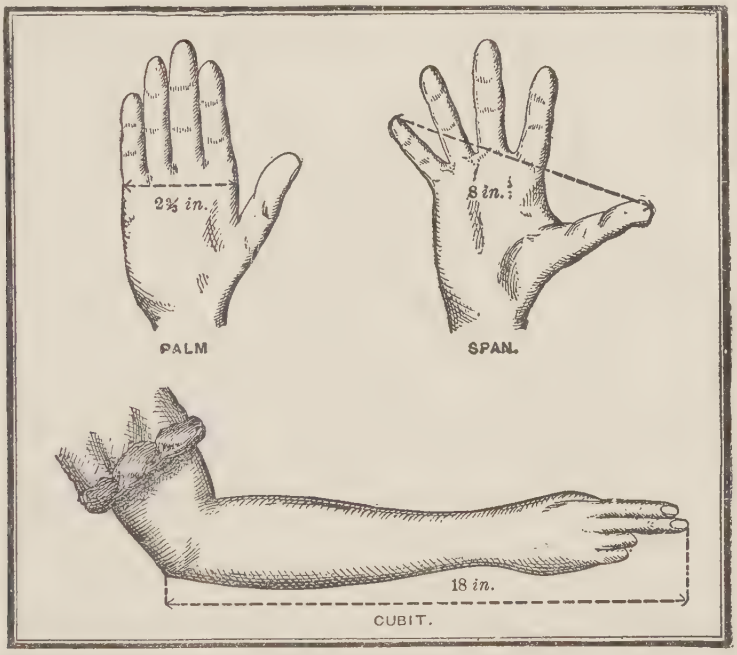
OF

Weights, Measures, and Money, Mentioned in the Bible.

Extracted Chiefly from Dr. Arbuthnot's Tables.

1. *Jewish Weights, reduced to English Troy Weight.*

	lbs.	oz.	pen.	gr.
The gerah, one-twentieth of a sheke	0	0	0	12
Bekah, half a shekel	0	0	5	0
The shekel	0	0	10	0
The maneh, 60 shekels	2	6	0	0
The talent, 50 manehs, or 3,000 shekels	125	0	0	0



SCRIPTURE MEASUREMENTS

2. *Scripture Measures of Length, reduced to English Measure.*

								Eng. feet.	inches.
A ligit								0	0.912
4	A palm							0	2.648
12	3	A span						0	8.944
24	6	3	A cubit					1	6.888
96	24	6	2	A fathom				7	3.552
144	36	12	6	1.5	Ezekiel's reed			10	11.328
192	48	16	8	2	1.3	An Arabian pole		14	7.104
1920	480	160	80	20	13.3	10	A *schoenus* or measuring line	145	11.04

3. *The Long Scripture Measures.*

						Eng. miles.	paces	feet
A cubit						0	0	1.824
400	A stadium or furlong					0	145	4.6
2000	5	A sabbath day's journey				0	729	3.
4000	10	2	An eastern mile			1	403	1.
12000	30	6	3	A parasang		4	153	3.
96000	240	48	24	8	A day's journey	33	172	4.

4. *Scripture Measures of Capacity for Liquids, reduced to English Wine Measure.*

							Gal.	pints.
A caph							0	0.625
1.3	A log						0	0.833
5.3	4	A cab					0	3.333
16	12	3	A hin				1	2.
32	24	6	2	A seah			2	4.
96	72	18	6	3	A bath or ephah		7	4.
960	720	180	60	20	10	A kor or choros, chomer or homer	75	5.

5. *Scripture Measures of Capacity for Things dry, reduced to English Corn Measure.*

						Pecks.	gal.	pints.
A gachal						0	0	0.1416
20	A cab					0	0	2.8333
36	1.8	An omer or gomer				0	0	5.1
120	6	3.3	A seah			1	0	1.
360	18	10	3	An ephah		3	0	3.
1800	90	50	15	5	A letech	16	0	0.
3600	180	100	30	10	2	A chomer, homer or kor	32	0	1.

6. *Jewish Money, reduced to the English Standard.*

				£	s.	d.	$	cts.
A gerah				0	0	1.3687	0	02.5
10	A bekah			0	1	1.6875	0	25.09
20	2	A shekel		0	2	3.375	0	50.187
1200	120	50	A maneh, or mina Hebr	5	14	0.75	25	09.35
60000	6000	3000	60	A talent		342	3	9.	1505	62.5
A solidus aureus, or sextula, was worth				0	12	0.5	2	64.09
A siclus aureus, or gold shekel, was worth				1	16	6.	8	03.
A talent of gold was worth				5475	0	0.	24309	

In the preceding table, silver is valued at 5*s.* and gold at £4 per ounce.

7. *Roman Money, mentioned in the New Testament, reduced to the English Standard.*

	£	s.	d.	far.	$	cts.
A mite (Λεπτόν or Ἀσσάριον)	0	0	0	$0\frac{3}{4}$	0	00.34375
A farthing (Κοδράντης) about	0	0	0	$1\frac{1}{2}$	0	00.6875
A penny or denarius (Δηνάριον)	0	0	7	2	0	13.75
A pound or mina	3	2	6	0	13	75

The Calendar of the Jews.

THE year of the Hebrews is composed of twelve lunar months, of which the first has thirty days, and the second twenty-nine; and so the rest successively, and alternately. The year begins in autumn, as to the civil year; and in the spring, as to the sacred year. The Jews had calendars, anciently, wherein were noted all the feasts—all the fasts—and all the days on which they celebrated the memory of any great event that had happened to the nation, Zech. viii. 19; Esth. viii. 6, *in Græco.* These ancient calendars are sometimes quoted in Talmud (Misna Tract. Taanith, n. 8), but the rabbins acknowledge that they are not now in being. *(Vide* Maimonides *et* Bartenora, *in eum locum.)* Those that we have now, whether printed or in manuscript, are not very ancient. *(Vide* Genebrar. Bibliot. Rabinic. p. 319; Buxtorf. Levit. Talmud. p. 1046; Bartolocci. Bibl. Rabbinic. tom. ii p. 550; Lamy's Introduction to the Scripture; and Plantav. Isagog. Rabbin. *ad finem.)* That which passes for the oldest, is Megillath Thaanith, "the volume of affliction;" which contains the days of feasting and fasting heretofore in use among the Jews; which are not now observed; nor are they in the common calendars. We shall insert the chief historical events, taken as well from this volume, Thaanith, as from other calendars.

TISRI.

The first month of the civil year; the seventh month of the sacred year. It has thirty days, and answers to the moon of September.

Day 1. New moon. Beginning of the civil year.

The feast of trumpets, Lev. xxiii. 24; Numb. xxix. 1, 2.

3. Fast for the death of Gedaliah, 2 Kings xxv. 25; Jer. xli. 2.

The same day, the abolition of written contracts. The wicked kings having forbidden the Israelites to pronounce the name of God when they were restored to liberty, the Asmoneans, or Maccabees, ordained, that the name of God should be written in contracts after this manner: "In such a year of the high-priest N, who is minister of the most high God," &c. The judges to whom these writings were presented, decreed they should be satisfied; saying, for example, "On such a day, such a debtor shall pay such a sum, according to his promise, after which the schedule shall be torn." But it was found that the name of God was taken away out of the writing; and thus the whole became useless and ineffectual. For which reason they abolished all these written contracts, and appointed a festival day in memory of it. (Megil. Taanith, c. 7.)

5. The death of twenty Israelites. Rabbi Akiba, son of Joseph, dies in prison.

7. A fast, on account of the worshipping the golden calf, and of the sentence God pronounced against Israel, in consequence of that crime, Exod. xxxii. 6—8, 34.

10. A fast of expiation, Lev. xxiii. 19, &c.

15. The feast of tabernacles, with its octave, Lev. xxiii. 34.

21. Hosanna-Rabba. The seventh day of the feast of tabernacles, or the feast of branches.

22. The octave of the feast of tabernacles.

23. The rejoicing for the law, a solemnity in memory of the covenant that the Lord made with the Hebrews, in giving them the law by the mediation of Moses.

On this same day, the dedication of Solomon's temple, 1 Kings viii. 65, 66.

30. The first new-moon of the month Marchesvan.

MARCHESVAN.

The second month of the civil year; the eighth month of the sacred year. It has but twenty-nine days, and answers to the moon of October.

Day 1. The second new-moon, or first day of the month.

6, 7. A fast, because Nebuchadnezzar put out the eyes of Zedekiah, after he had slain his children before his face, 2 Kings xxv. 7; Jer. lii. 10.

19. A fast on Monday and Tuesday, [Thursday?] and the Monday following, to expiate faults committed on occasion of the feast of tabernacles. (*Vide* Calendar, à Bartoloccio editum.)

23. A feast, or memorial of the stones of the altar, profaned by the Greeks; which were laid aside, in expectation of a prophet, who could declare to what use they might be applied, 1 Mac. iv. 46. (Megillath, c. 8.)

26. A feast in memory of some places possessed by the Cuthites; which the Israelites recovered at their return from the captivity.

A dispute of Rabbin Jochanan, son of Zachai, against the Sadducees, who pretended that the loaves of the first-fruits (Lev. xxiii. 17, 18) were not to be offered on the altar, but to be eaten hot. (Megil. c. 9.)

KISLEU.

The third month of the civil year; the ninth month of the sacred year. It has thirty days, and answers to our moon of November.

Day 1. New moon, or the first day of the month.

3. A feast in memory of the idols which the Asmoneans threw out of the courts, where the Gentiles had placed them. (Megil. Taanith.)

6. A fast in memory of the book of Jeremiah, torn and burnt by Jehoiakim, Jer. xxxvi. 23.

7. A feast in memory of the death of Herod the Great, son of Antipater; who was always an enemy to the sages. (Megillath, c. 11.)

21. The feast of mount Gerizim. The Jews relate that when their high-priest Simon, with

his priests, went out to meet Alexander the Great, the Cutheans or Samaritans went also, and desired this prince to give them the temple of Jerusalem, and to sell them a part of mount Moriah, whicl request Alexander granted. But the high-pries of the Jews afterwards presenting himself, and Alexander asking him what he desired, Simon entreated him not to suffer the Samaritans to destroy the temple. The king replied to him, that he delivered that people into his hands, and he might do what he pleased with them. Then the high-priest and inhabitants of Jerusalem took the Samaritans, bored a hole through their heels, and tying them to their horses' tails, dragged them along to mount Gerizim, which they ploughed and sowed with tares, just as the Samaritans had intended to do to the temple of Jerusalem. In memory of this event, they instituted this festival. [Comp. Sivan 25.]

24. Prayers for rain. (Calendar Bartolocci.)

25. The dedication, or renewing of the temple, profaned by order of Antiochus Epiphanes, and purified by Judas Maccabæus, 1 Mac. iv. 52; 2 Mac. ii. 16; John x. 22. This feast is kept with its octave. Josephus says, that in his time it was called the feast of lights; perhaps, he says, because this good fortune, of restoring the temple to its ancient use, appeared to the Jews as a new day. (Antiq. lib. xii. cap. 11.) But the Jewish authors give another reason for the name of lights. They report, that when they were employed in cleansing the temple, after it had been profaned by the Greeks, they found there only one small phial of oil, sealed up by the high-priest, which would hardly suffice to keep in the lamps so much as one night; but God permitted that it should last several days, till they had time to make more; in memory of which, the Jews lighted up several lamps in their synagogues, and at the doors of their houses. (*Vide* Selden, de Syned. lib. iii. cap. 13.) Others affirm (as the Scholastical History, Thomas Aquinas, cardinal Hughgo, on 1 Mac. iv. 52) that the appellation of the feast of lights was a memorial of that fire from heaven which inflamed the wood on the altar of burnt-offerings, as related 2 Mac. i. 22.

Some think this feast of the dedication was instituted in memory of Judith. (*Vide* Sigon, lib. iii. cap. 18. de Republ. Hebr.) But it is doubted whether this ought to be understood of Judith, daughter of Merari, who killed Holofernes; or of another Judith, daughter of Mattathias, and sister of Judas Maccabæus, who slew Nicanor, as they tell us. (*Vide* Ganz, Zemach David; Millenar. 4. an. 622. et apud Selden. de Synedriis, lib. iii. cap. 13. n. 11.) This last Judith is known only in the writings of the rabbins, and is not mentioned either in the Maccabees, or in Josephus. But there is great likelihood that the Jews have altered the Greek history of Judith, to place it in the time of Judas Maccabæus.

A prayer for rain. Time of sowing begins in Judea.

30. First new-moon of the month Tebeth.

TEBETH.

The fourth month of the civil year; the tenth month of the ecclesiastical year. It has twenty-nine days, and answers to the moon of December.

Day 1. New-moon.

8. A fast, because of the translation of the law out of Hebrew into Greek. This day, and the three following days, were overcast by thick darkness.

The fast of the tenth month. (Calend. Bartolocci.)

9. A fast for which the rabbins assign no reason.

10. A fast in memory of the siege of Jerusalem by Nebuchadnezzar, 2 Kings xxv. 1.

28. A feast in memory of the exclusion of the Sadducees out of the Sanhedrim, where they had all the power in the time of king Alexander Jannæus. Rabbi Simeon, son of Shatach, found means of excluding them one after another, and of substituting Pharisees. (Megillat. Tannith.) [Comp. Jiar 23.]

SHEBET.

The fifth month of the civil year; the eleventh month of the sacred year. It has thirty days, and answers to the moon of January.

Day 1. New-moon, or the first day of the month.

2. A rejoicing for the death of king Alexander Jannæus, a great enemy to the Pharisees. (Megill.)

4 or 5. A fast in memory of the death of the elders, who succeeded Joshua, Judg. ii. 10.

15. The beginning of the year of trees, that is, from hence they begin to count the four years, during which trees were judged unclean, from the time of their being planted, Lev. xix. 23—25. Some place the beginning of these four years on the first day of the month.

22. A feast in memory of the death of one called Niskalenus, who had ordered the placing images or figures in the temple, which was forbidden by the law: but he died, and his orders were not executed. The Jews place this under the high-priest Simon the Just. It is not known who this Niskalenus was. (Megill. c. 11.)

23. A fast for the war of the ten tribes against that of Benjamin, Judg. xx.

They also call to remembrance the idol of Micah, Judg. xviii.

29. A memorial of the death of Antiochus Epiphanes; an enemy of the Jews, 1 Mac. vi. 1. (Megillath.)

30. First new-moon of the month Adar.

ADAR.

The sixth month of the civil year; the twelfth month of the sacred year. It has but twenty-nine days, and answers to the moon of February.

Day 1. New-moon.

7. A fast, because of the death of Moses, Deut. xxxiv. 5.

8, 9. The trumpet sounded, by way of thanksgiving for the rain that fell in this month, and to pray for it in future. (Megillath Taanith.)

9. A fast in memory of the schism between the schools of Shammai and Hillel [called Taanith Tzadehim].

12. A feast in memory of the death of two proselytes, Hollianus and Pipus his brother, whom one Tyrinus or Turianus would have compelled to break the law, in the city of Laodicea; but they chose rather to die, than to act contrary to the law. (Selden, de Synedr. lib. iii. cap. 13. ex Megill. Taanith.)

13. Esther's fast; probably in memory of that, Esth. iv. 16. (Geneb. Bartolocci.)

A feast in memory of the death of Nicanor, an enemy of the Jews, 1 Mac vii. 44; 2 Mac. xv. 30, &c. Some of the Hebrews insist, that Nicanor was killed by Judith, sister of Judas Maccabæus.

14. The first purim, or lesser feast of lots, Esth. ix. 21. The Jews in the provinces ceased from the slaughter of their enemies on Nisan 14, and on that day made great rejoicing. But the Jews of Shushan continued the slaughter till the 15th. Therefore Mordecai settled the feast of lots on the 14th and 15th of this month.

15. The great feast of purim, or lots; the second purim. These three days, the 13th, 14th and 15th, are commonly called the days of Mordecai; though the feast for the death of Nicanor has no relation either to Esther or to Mordecai.

The collectors of the half-shekel, paid by every Israelite (Exod. xxx. 13), received it on Adar 15, in the cities, and on the 25th in the temple. (Talmud. Tract. Shekalim.)

17. The deliverance of the sages of Israel, who, flying from the persecution of Alexander Jannæus, king of the Jews, retired into the city of Koslik in Arabia; but finding themselves in danger of being sacrificed by the Gentiles, the inhabitants of the place, they escaped by night. (Megill. Taanith.)

20. A feast in memory of the rain obtained from God, by one called Onias Hammagel, during a great drought in the time of Alexander Jannæus. (Megill. Taanith.)

23. The dedication of the temple of Zerubbabel, Ezra vi. 16. The day is not known. Some put it on the 16th, the calendar of Sigonius puts it on the 23d.

28. A feast in commemoration of the repeal of the decree by which the kings of Greece had forbidden the Jews to circumcise their children, to observe the sabbath, and to decline foreign worship. (Megill. Taanith, et Gemar. ut Tit. Thainith., c. 2.)

When the year consists of thirteen lunar months, they place here, by way of intercalation the second month of Adar, or Ve-adar.

NISAN, or ABIB. Exod. xiii. 4.

The seventh month of the civil year; the first month of the sacred year. It has thirty days, and answers to the moon of March.

Day 1. New-moon. A fast, because of the death of the children of Aaron, Lev. x. 1, 2.

10. A fast for the death of Miriam, the sister of Moses, Numb. xx. 1. Also in memory of the scarcity of water that happened, after her death, to the children of Israel in the desert of Kadesh, Numb. xx. 2.

On this day every one provided himself a lamb or kid, preparatory to the following passover.

14. On the evening of the 14th they killed the paschal lamb; they began to use unleavened bread, and ceased from all servile labor.

15. The solemnity of the passover, with its octave. The first day of unleavened bread, a day of rest. They ate none but unleavened bread during eight days.

After sunset they gathered a sheaf of barley which they brought into the temple. (Cod. Menachot. vi. 3.)

Supplication for the reign of the spring. (Geneb.)

16. On the second day of the feast, they offered the barley which they had provided the evening before, as the first-fruits of the harvest. After that time, it was allowed to put the sickle to the corn.

The beginning of harvest.

From this day they began to count fifty days to pentecost.

21. The octave of the feast of the passover. The end of unleavened bread. This day is held more solemn than the other days of the octave; yet they did not refrain from manual labor on it.

26. A fast for the death of Joshua, Josh. xxiv. 29.

30. The first new-moon of the month Jiar.

The book called Megillath Taanith does not notice any particular festival for the month Nisan.

JIAR, or IVAR.

The eighth month of the civil year; the second month of the ecclesiastical year. It has but twenty-nine days, and answers to the moon of April.

Day 1. New-moon.

6. A fast of three days for excesses committed during the feast of the passover, that is, on the Monday, Thursday, and the Monday following. (Calendar Bartolocci.)

7. The dedication of the temple, when the Asmoneans consecrated it anew, after the persecutions of the Greeks. (Megill. Taanith c. 2.)

10. A fast for the death of the high-priest Eli, and for the capture of the ark by the Philistines.

14. The second passover, in favor of those who could not celebrate the first, on Nisan 15.

23. A feast for the taking of the city of Gaza, by Simon Maccabæus. (Calend. Scalig. 1 Mac. xiii. 43, 44.)

Or for the taking and purification of the citadel of Jerusalem, by the Maccabees; according to the calendar of Sigonius, 1 Mac. xiii. 49, 53; xvi. 7, 36.

A feast for the expulsion of the Caraites out of Jerusalem, by the Asmoneans or Maccabees. (Meg. Taanith.) [Comp. Tebeth 28.]

27. A feast for the expulsion of the Galileans, or those who attempted to set up crowns over the gates of their temples, and of their houses; and even on the heads of their oxen and asses; and to sing hymns in honor of false gods. The Maccabees drove them out of Judea and Jerusalem, and appointed this feast to perpetuate the memory of their expulsion. (Megill. Taanith.)

28. A fast for the death of the prophet Samuel, 1 Sam. xxv. 1.

SIVAN.

The ninth month of the civil year; the third month of the ecclesiastical year. It has thirty days, and answers to the moon of May.

Day 1. New-moon.

6. Pentecost, the fiftieth day after the passover. Called also the Feast of Weeks, because it happened seven weeks after the passover. We do not find that it had any octave.

15, 16. A feast to celebrate the victory of the Maccabees over the people of Bethsan, 1 Mac. v. 52; xii. 40, 41. (Megill. Taanith.)

17. A feast for the taking of Cæsarea by the Asmoneans; who drove the pagans from thence, and settled the Jews there. (Megill. Taanith.)

22. A fast in memory of the prohibition by Jeroboam, son of Nebat, to his subjects, forbidding them to carry their first-fruits to Jerusalem, 1 Kings xii. 27.

25. A fast in commemoration of the death of the rabbins, Simeon, son of Gambaliel, Ishmael, son of Elisha, and Chanina, the high-priest's deputy.

A feast in memory of the solemn judgment pronounced in favor of the Jews by Alexander the Great, against the Ishmaelites, who, by virtue of their birthright, maintain a possession of the land of Canaan, against the Canaanites, who claimed the same, as being the original possessors, and against the Egyptians, who demanded restitution of the vessels and other things, borrowed by the Hebrews, when they left Egypt. (*Vide* Megallath Taanith.) But the Gemara of Babylon (Tit. Sanhedrim, c. 11.) puts the day of this sentence on Nisan 14. [Comp. Cisleu 21.]

27. A fast, because rabbi Chanina, the son of Thardion, was burnt with the book of the law.

30. The first new-moon of the month Thammuz.

THAMMUZ, or TAMUZ.

The tenth month of the civil year; the fourth month of the holy year. It has but twenty-nine days, and answers to the moon of June.

Day 1. New-moon.

14. A feast for the abolition of a pernicious book of the Sadducees and Bethusians, by which they endeavored to subvert the oral law, and all the traditions. (Megill. Taanith.)

17. A fast in memory of the tables of the law, broken by Moses, Exod. xxxii. 19.

On this day the city of Jerusalem was taken. The perpetual evening and morning sacrifice was suspended during the siege of Jerusalem by Titus. Epistemon tore the book of the law, and set up an idol in the temple. It is not said whether this happened under Nebuchadnezzar, Antiochus Epiphanes, or the Romans.

Ab.

The eleventh month of the civil year; the fifth month of the sacred year. It has thirty days, and answers to the moon of July.

1. New-moon. A fast for the death of Aaron the high-priest.

5. A commemoration of the children of Jethuel, of the race of Judah, who, after the return from the captivity, furnished wood to the temple. (Megill. Taanith.)

9. A fact of the fifth month, in memory of God's declaration to Moses on this day, that none of the murmuring Israelites should enter the land of promise, Numb. xiv. 29, 31.

On the same day the temple was taken and burnt; Solomon's temple first by the Chaldeans; Herod's temple afterwards by the Romans.

18. A fast, because in the time of Ahaz the evening lamp went out.

21. Xylophoria; a feast on which they stored up the necessary wood in the temple. (Selden. *Vide* Josephus, de Bello, lib. ll. cap. 17.) Scaliger places this festival on the 22d of the next month.

24. A feast in memory of the abolition of a law by the Asmoneans, or Maccabees, which had been introduced by the Sadducees, enacting, that both sons and daughters should alike inherit the estates of their parents. (Megill. Taanith.)

30. The first new-moon of the month Elul.

ELUL.

The twelfth month of the civil year; and the seventh month of the ecclesiastical year. It has but twenty-nine days, and answers to the moon of August.

Day 1. New-moon.

7. Dedication of the walls of Jerusalem by Nehemiah, Ezra xii. 27. We read in Neh. vi. 15, that these walls were finished Elul 25. But as there still remained many things to be done, to complete this work, the dedication might have been deferred to the 7th of Elul of the year following. (Megill. Seld.)

17. A fast for the death of the spies, who brought an ill report of the land of promise, Numb. xiv. 36.

A feast in remembrance of the expulsion of the Romans [rather the Greeks], who would have prevented the Hebrews from marrying, and who dishonored the daughters of Israel. When they intended to use violence towards Judith, the only daughter of Mattathias, he, with the assistance of his sons, overcame them,

and delivered his country from their yoke. In commemoration of which deliverance, this festival was appointed.

21. Xylophoria; a feast in which they brought to the temple the necessary provision of wood for keeping in the fire of the altar of burnt-sacrifices. The calendar of Scaliger places this feast on the 22d. (*Vide* the 21st of the foregoing month.)

22. A feast in memory of the punishment inflicted on the wicked Israelites, whose insolence could not be otherwise restrained than by putting them to death; for then Judea was in the possession of the Gentiles. They allowed these wicked Israelites three days to reform but as they showed signs of repentance, they were condemned to death. (Megill. Taanith.)

[From the beginning to the end of this month, the cornet is sounded to warn of the approaching new year.]

SACRED YEAR. *Names and Order of the Hebrew Months.*		CIVIL YEAR. *Names and Order of the Hebrew Months.*	
1.	Nisan, answer to.....March, O. S.	7 1.	Tizri .....September, O. S.
2.	Jiar .....April.	8 2.	Marchesvan .....October.
3.	Sivan .....May.	9 3.	Cisleu .....November.
4.	Thammuz .....June.	10 4.	Thebet .....December.
5.	Ab .....July.	11 5.	Sebat .....January.
6.	Elul .....August.	12 6.	Adar .....February.
7.	Tizri .....September.	1 7.	Nisan .....March.
8.	Marchesvan .....October.	2 8.	Jiar .....April.
9.	Cisleu .....November.	3 9.	Sivan .....May.
10.	Thebet .....December.	4 10.	Thammuz .....June.
11.	Sebat .....January.	5 11.	Ab .....July.
12.	Adar .....February.	6 12.	Elul .....August.

Biblical Time.

NIGHT (Ancient).

First Watch, till midnight (Lam, ii. 19)
Middle Watch, till 3 A. M. (Judg. vii. 19).
Morning Watch, till 6 A. M. (Ex. xiv. 24).

DAY (Ancient).

The Morning was till about 10 A. M.
The Heat of Day was till about 2 P. M.
The Cool of Day was till about 6 P. M.

NIGHT (New Testament).

First Watch, evening, from 6 to 9 P. M.
Second Watch, midnight, from 9 to 12 P. M.
Third Watch, cock-crowing, from 12 to 3 A. M.
Fourth Watch, morning, from 3 to 6 A. M.

DAY (New Testament).

The Third Hour was from 6 to 9 A. M.
The Sixth Hour was from 9 to 12 M.
The Ninth Hour was from 12 to 3 P. M.
The Twelfth Hour was from 3 to 6 P. M.

From sunrise to sunset was the *Natural Day.*
From sunset to sunrise was the *Natural Night.*
From sunset one evening to sunset of the next was the *Civil Day;* see Gen. i. 5, "And the evening and the morning were the first day.

Special Prayers of the New Testament.

BY WHOM OFFERED.	WHERE RECORDED.	FOR WHAT PURPOSE OFFERED.
Jesus.	Matt. xi: 25-27.	Thanksgiving.
Jesus.	Matt. xxvi: 39, 42.	For strength to bear affliction.
Jesus.	Matt. xxvii: 46.	Under suspension of Divine consolation.
Pharisee.	Luke xviii: 11, 12.	To set forth his own righteousness.
The Publican.	Luke xviii: 13.	For forgiveness.
The dying thief.	Luke xviii: 42.	To be remembered by Jesus.
Jesus.	Luke xxiii: 34.	For forgiveness of his slayers.
Jesus.	John xi: 41, 42.	Thanksgiving for Father's acceptance of prayer.
Jesus.	John xii: 27, 28.	Imploring his Father's aid.
Jesus.	John xvii.	For unity of Himself, his Apostles and all believers.
The Apostles.	Acts i: 24, 25.	For Divine aid in choosing an Apostle.
The Early Church.	Acts iv: 24-30.	For protection under persecution.
Stephen.	Acts vii: 60.	Commendation of his soul to God; forgiveness of his murderers.

Stories and Conversations

"To business that we love we rise betime
And go to 't with delight"—*Antony and Cleopatra.*

THE art of story telling is older than human history, dating back to the time when mythology had its golden era, long before the folklore known to us flourished among the peoples of western Europe. These peoples depended entirely upon the spoken words combined with gesture to convey thought and feeling. Although we still rely to a large extent upon the spoken words and the gesture to impress our thought and feeling upon others, we depend very largely upon the printed page as a vehicle to record and convey to others our thoughts and the history of the achievements of man.

The myths of nature, such as are based upon life in the forests and among mountains, the stories of natural objects, personified as spirits and animals, have been of interest throughout the primitive ages and have lost nothing of their interest in modern times. The myths, stories, fairy-tales, folklore and hero stories developed step by step and passed from one tribe to another. These stories became known among the common people of the village as well as in the courts of the higher classes.

Story telling at present is experiencing a revival of interest. Teachers and writers are searching the literature of the world, and through the printers' art the old legends, myths, fables and fairy-tales, supplemented by many new creations, are preserved in story books published from time to time. Many magazines employ writers of wide experience to search for stories suitable for mothers as well as teachers in day schools and Sunday schools. These stories furnish material for the home, the playground, the school, the army camp and in fact for every line of study and pastime.

No one doubts that there is a benefit in story telling and in practical conversation on common and interesting subjects. Through these channels a closer relationship and a feeling of comradeship are established, hence they not only afford exercise but also aid in creating interest and promoting discipline. Often when a pupil becomes tired of study, weary of looking over the printed pages of the lesson, new interest can be created and greater effort can be induced by relating a practical story.

Story telling is especially helpful in building up the imaginative powers of the mind. The imagination is not only strengthened and developed, but the mind is stimulated to become creative in its activities. When children are led to believe that all human beings have a guardian angel, a guide to approve right action and a constant protector against impending danger, they imagine themselves ac-

Every Child has a Guardian Angel.

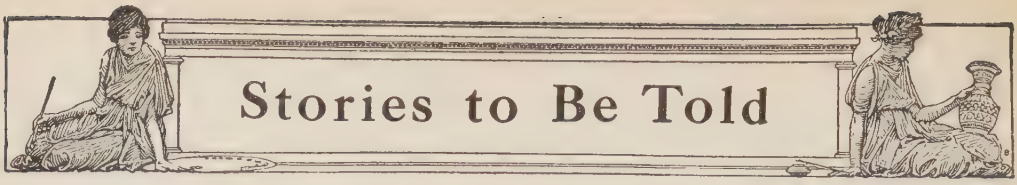
companied by this good spirit in all their ways. This influence will constantly call into action the voice within known as conscience, which ever checks us from doing the wrong and approves and justifies our right deeds. All this tends to overcome indolence and inactivity on the one hand, and to induce moral effort and impress truth more vividly on the other hand.

No teacher of experience will doubt the efficiency of story telling in cultivating the emotions. Under this topic we may classify development in altruism, that is, interest in the welfare of others; and we may also keep in mind the growth of intellect as well as the development of the esthetical emotions. Often a good story well told will do more in building character than the discussion of precepts, especially if it is related in a tactful and sympathizing manner. Above all else the story can be employed to develop the religious emotion, especially to induce the learner to understand the love, power, beauty and wisdom of the Creator.

The attention of the reader is called to the articles in the preceding volumes as a real help in outlining stories and employing them to the best possible advantage in furnishing entertainment and in shaping the conduct of children. Together with the stories that follow in this volume, we recommend the materials and the employment of methods suggested in this work of reference. The reader is referred to the following list of

Topics of Vital Interest.

Adonis.
Andersen, Hans Christian
Circe.
Cyclops.
Dryades.
Echo.
Fairies.
Fates.
Folklore.
Frigga.
Golden Fleece.
Hecuba.
Hercules.
Hesperides.
Jason.
Juno.
Laocoön.
Lares.
Lethe.
Lotus.
Mab.
Mermaid.
Morpheus.
Munchhausen, Karl
Muses.
Mythology.
Neptune.
Nymphs.
Odin.
Orestes.
Pan.
Parable.
Paris.
Pluto.
Priam.
Prometheus.
Proserpina.
Puck.
Reynard the Fox.
Romulus.
Sirens.
Styx.
Thor.
Triton.
Venus.
Vulcan.
Walhalla.
Woden.



Stories to Be Told

A FEW years ago three of us were taking a walk in the meadow—Myrtle, Verner, and I. Myrtle is my niece, nine years old, and Verner my nephew, a few years younger.

There are many nephews and nieces in the world, but these two, I think, are quite the best. Their only fault, so far as I know, is their habit of asking many questions.

It is very likely that they had not learned what is meant by the old saying: "A child can ask more questions than a wise man can answer." But Myrtle and Verner regard their Uncle Bernhart—that is myself—as being one of the wisest men that ever lived, and for that reason feel free to ask me very many questions.

"What does that number mean on the iron plate up there?" asked Myrtle as we came out of the meadow, where we had gathered wild gum and picked some flowers, and were entering the wide, open road. She pointed to an iron plate at the end of the bridge which spanned the small stream. On it were the number 1896 and the letter A. D., like this A. 1896 D.

"That number," I said, "tells what year the bridge was built."

"And the A. D.—what does that mean?" asked Verner.

"That," I explained, "stands for Anno Domini."

They were greatly puzzled, both of them.

"You don't understand, do you?" I asked. "Well, no wonder. Anno Domini is Latin, and means: 'In the year of our Lord.' Do you understand now?"

They were honest and said: "No." They could not see why 1896 should be called the year of our Lord.

"Was the Lord so very good in 1896?" asked Myrtle. (Just the sort of question she likes to ask.)

"The Lord is always good," I said, "and never changes. And if I were to build a fine large house this year, I would have the mason chisel into the corner-stone, 'A. D.'—'year of our Lord.'"

"So it is always the year of our Lord?" asked Myrtle.

"It is, ever since Jesus was born."

Nephew and niece looked at me in open-eyed wonder. More questions were coming.

"Why———," began Verner.

"But what———," began Myrtle.

"Now, dears," I said, rather quickly, "let us sit down on the old stone bench by the garden wall, and I will tell you why we count our years from the year in which Jesus was born. You will just listen, and ask no questions at all, for I shall meet you here often and from time to time I will tell you many stories, including the events that took place more than nineteen hundred years ago, in the year which Christians agreed to call the year One.

So we sat down,—Myrtle, Verner, and I,—and we met many times since to talk over and ponder about ever so many interesting tales that are well known to older people. Both Myrtle and Verner always were as quiet as little mice when I told them a story, and this is why I delighted in spending much time in this way. However, the first story I told is the one that illustrates that "He plays well that wins."

The Fox and the Cat.

A fox and a cat once met on a heath, and had a long chat on things of state. The fox said, "Let the war turn out as bad as it may, it is all one to me, for I have lots of plans by which to save my life. But now, pray tell me, puss, if the foe should come, what course do you mean to take?" "Nay," says the cat, "I have but one shift, and if that will not do, I am lost."

Just then a pack of hounds came on them in full cry. Puss, by the help of her one trick, ran up a tree, from the top branch of which she saw that the fox, who had not the skill to get out of sight, was torn to death by the hounds. "Great boast, small roast," quoth the cat, "but he plays well that wins."

Indian Houses.

The Indian house or wigwam was a tent of bark or mats held up by poles. There was but one room. The family slept on mats or skins on the ground.

The fire was built in the middle, the smoke going out through a hole in the roof. The Indian got his fire by twirling the end of a stick against another piece of wood. How do you suppose they boiled water and cooked their food?

Many of them had wooden vessels which they did not dare to put on the fire. So they put water into their wooden bowls and threw in heated stones.

When the water was very hot, they put in it whatever they had to cook. Father's dinner would not be on the table in time if we had to cook in this slow way.

Fish and meat were laid over the fire on a gridiron of sticks. They roasted corn and squash under hot ashes. They had no salt. They used the leaves of the bay and of some plants for seasoning.

After his dinner the Indian filled his pipe and smoked in silence.

Holland.

Holland is a very strange country. It is flat and has a rich soil.

The little Dutch boys cannot coast down the hills on their sleds, for there are no hills, except small ones on the western boundary.

It is so low and level that the sea could run over it, but the people built dykes or dams to keep the water back. Even then some water gets in, which the large windmills pump into the canals.

"What land is this that seems to be
A mingling of the land and sea?
Where over fields and pastures green
The painted ships float high in air,
And over all and everywhere
The sails of windmills sink and soar,
Like wings of sea-gulls on the shore."

Canals run through the center of the streets in many of the cities, such as Amsterdam, Rotterdam and The Hague. This is just where the trolley tracks are in the cities of America.

Instead of cars and carriages passing, you see boats sailing before the front door of many stores and shops.

In our cities, when the builder begins a new house, he digs the cellar first. In Holland, he sinks posts down into the soft wet earth. He then builds the house on top of them.

In this strange place the English, known as the Pilgrims, lived for a time before they came to America in a ship called the *Mayflower*.

America.

Amerigo Vespucci, the noted traveler, was born in Italy in 1451 and died in the early part of the sixteenth century. Why this continent is named after him is an interesting story.

Some people think that it ought to be called Columbia, after Christopher Columbus, who discovered the West Indies, which form an interesting part of the new world. For this reason we often sing "Hail, Columbia, happy land."

Amerigo Vespucci was a great sailor and crossed the Atlantic Ocean many times. This was not so hard to do after Columbus had shown the way.

Vespucci was a good story teller and wrote much about what he had seen in America. What he wrote was so interesting that people began to call it his land, just as if he had found it.

It sometimes happens that those who talk well are praised for what other people do. So it happened that when the maps were made, showing this new land, it was called "America" on them.

AMERIGO VESPUCCI.

Now it may be that you think that America ought to be called Columbia. Do you?

Well! well! I am afraid that it cannot be changed now. So many millions of people have grown used to saying, "America." It is a pretty name, too, and we love it.

Robinson Crusoe.

"I wonder what an island is?" Verner asked me one day.

It had been raining all the afternoon, so Myrtle called her cousin to the window and pointed out a little piece of ground with water around it on every side "That is an island, Verner, where the ground has water all around it in the path, near the rose-bush."

"Oh, I see!" said Verner. "Is there an island in the Saint Lawrence River?"

"Yes, there are about one thousand, hence this portion of the great river is called Lake of a Thousand Isles."

In the evening, all the family were in the study. Verner asked his father to tell them about the man who lived alone on an island, and did not like it.

"I know who it was," said Verner; "his name was Robinson Crusoe. But it is all a tale. There never was such a man."

"True," replied his father; "but many men have lived alone upon an island, and this story tells how a man feels when left alone on a distant island."

"I never heard it," said Myrtle. "Do tell us about it, uncle."

This is the story I told:

"Crusoe sailed in a ship that ran on a rock, and every man on board was drowned except himself. The waves cast him on shore, and then he found he was on an island where no one lived."

"Not even wild men?" asked Verner.

"No. When the sea was calm he saw the ship still resting on a rock, and he thought the best thing to do was to get out of her all that he could. So he made a raft, and on this raft he brought out of the ship casks of biscuit and barrels of powder, and guns and swords and all sorts of useful things. In the ship he found some money, but it was so useless to him that he very nearly threw it into the sea."

"Oh, how foolish!" cried Verner.

"Well, what could he buy with it? There were no shops in the island."

"But he might have kept it," replied Verner.

"I believe he did keep it," I went on. "But money is of no use in itself. We like it because we can almost always change it for other things that we want; and as Crusoe could not do this, a single box of matches, such as we can buy for a penny, would have been worth more to him than a hundred dollars in gold.

"When he had got a good many things on shore, the ship went to pieces and he saw no more of her. He had now to make himself a house. He found a hill not far from the shore, and against the side of this hill he made a tent with sails and masts from the ship.

"Then he made a fence around the front of his tent. This fence was made of live wood stuck in the ground. The wood sprouted and grew so as to make a thick grove before the tent. Besides this, Crusoe dug a cave under the hill behind his tent, and made rooms in it to hold his stores."

"What sort of stores did Crusoe keep in his cave?" asked Myrtle. "I thought it was a desert island."

"Yes," I said; "but 'desert' does not always mean the same thing as 'barren.' Crusoe found some grains of rice and barley, and sowed them in the ground. After a while he had quite a crop, and he needed a place to store and protect it.

ROBINSON CRUSOE AND HIS SERVANT FRIDAY.

Then, besides, he had guns and powder and tools that were got out of the ship, and all these had to be kept dry. So the cave was very useful."

"Had he nothing to eat but biscuits and barley and rice?" asked Verner.

"Oh, yes," I replied; "with his guns he shot birds that were good to eat. He found goats, too, running wild. He shot these at first, but then he caught some of them and tamed them. After a while he had quite a nice little flock."

"Why, they could give him milk," cried Myrtle.

"Yes, to be sure," I replied; "and he learned to make butter and cheese of the milk."

"But you said he did not like the island. Why not?" asked Verner.

"Well, it was very lonely," I replied. "You know the Bible says it is not good for man to be alone."

"I should not mind it for a little while," said Verner. "How long was he there?"

"He was there more than twenty-seven years, but for the last three years he had a servant to be with him. Not far off across the water there was a land where tribes of red men lived. Once they came in their canoes to Crusoe's island, bringing a young man, whom they were going to kill and eat."

"To eat!" cried Myrtle; "how horrible!"

"So it was," I replied. "But Crusoe saved him and got him free."

"How did he do it?" asked Verner.

"The young man ran away, and he was chased for a long way by his keepers. Crusoe knocked down one of them and also shot one. The poor man that was saved then became Crusoe's servant, and his name was called Friday."

"What a strange name!" cried the children.

"Well, it was on a Friday that Crusoe found him," I explained, "and that was the reason of the name. But you must read the story for yourselves. After reading it, Verner will not wish to live on an island by himself."

The Lady's Slipper.

The lady's slipper is a very beautiful flower. It belongs to the family of orchids, and if you are a little boy or little girl who has heard older people talk about the wonderful and beautiful orchids which you can find in green-houses, and which florists show sometimes at fairs and other public places, you will be able to know something about what the word orchid means. They are the most

ORCHIDS.
1, Dendrobium densiflorum; 2, Lady's Slipper.

showy flowers that can be found anywhere. In Japan the orchids grow very finely. Some are purple, some are red, some are spotted, some are striped, some are white with purple stripes, and others are purple with white stripes, but there is not one of these orchids which is not a very handsome flower. Some are spotted and tinted with yellow, with a deep crimson and purple at the edges. Would you not say that was a superb flower?

On an island named Sumatra, the orchids grow in great variety and in great beauty. Now, all these beautiful flowers are sisters, although they are not exactly alike, just as all roses are not alike and as you perhaps do not very much look like

your sister or brother, yet you both belong to the same family. The particular orchid which is named lady's slipper is a fine plant with large downy leaves and flowers of a beautiful white and rose color. It grows from one to two feet high, and can be found in its wild state in North America. It blooms generally in May and June.

Look at the picture very carefully and see how closely it resembles a lady's slipper. Do you not think so? It looks very much like the shoes knit of zephyr which your mamma wears in her chamber, and perhaps you have a pair, too. I am sure you have seen bedroom slippers which look very much like this flower. The next time you visit a green-house be sure to ask to see the orchids, and I am sure you will say afterwards that you never knew of so many beautiful shades of color. You will find almost every color under the sun, in a large collection of orchids.

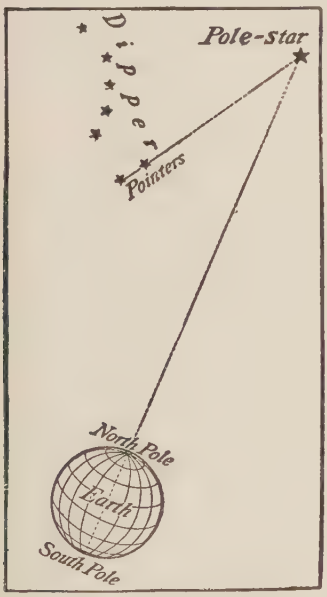
The lady's slipper, though not so showy as some of the orchids, is one of the most beautiful. The pretty rose and white slippers hang from the stem so gracefully you almost feel tempted to put them on.

Legend of the Great Dipper.

The faces of the stars shone so brightly one night that the earth-children thought the moon was telling a pretty story. And so she was, and this is the story:

The Great Dipper which you, my dear children, love to see, has a deep meaning which you are not to forget as long as the stars shine. I will tell you the story.

In another world than ours, said Lady Moon, there was once a great trouble and sorrow. No, it was not in the earth world, she said to a small star who always asked questions; it was not in the heaven world either, but in another far-away world, where many children lived.



For some good reason, which only the Father knows, the people and children, the animals and every living thing, were suffering great thirst; and no water, nor dew, nor a drop of moisture could they find anywhere. A little child of that world went out alone in the dry, dark night, carrying a small tin dipper, and prayed very earnestly for just that little cup of water; and when she lifted the cup, it was brimming with clear cold water, which would not spill, though she ran rapidly, her hand trembling with her faintness, for she did not taste the water, having prayed for another's need. As she ran, she stumbled and fell, for she was very weak; and when feeling about, trying to rise, she touched a little dog that seemed dying of thirst, and the good child poured a few drops of the precious water in the palm of her hand and let the dog lap it. He seemed as refreshed as if he had drank from a river.

The child could not see what happened to her cup; but we saw and sang for joy. The cup turned to silver, and grew larger, the water not having become less, but more, by her giving.

She hurried on to give the water to one who was quite unable to come to meet her,—none other than her own dear mother, who took the water eagerly,

as one in a deadly fever, but without putting it to her lips; for she heard just then a weak moan which came from the faithful servant who tried to raise her mistress' head, but found she had not the strength. The mother pressed the dipper into the hands of the maid, and bade her drink, feeling her own life so wasted that one little cup of water could not renew it. And neither the servant nor mistress noticed that the dipper changed from silver to gold, and grew larger than before.

The good servant was about to give each member of the family one spoonful of the precious water, when a stranger entered, dressed in a costume unknown in that country, and speaking in a strange tongue, but showing the same signs of thirst and distress as themselves. The servant said, "Sacred are the needs of the stranger in a strange land," and pressed the dipper to the parched lips of the fainting man.

Then the great wonder was wrought! and lo the golden dipper flashed forth incrusted with the most precious diamonds, containing a fountain of gushing water, which supplied the thirsting nation as freely and surely as it had quenched the thirst of the little dog.

And the Stranger stood before them, a glorious, radiant Being; and as He faded from their sight, a silver trumpet tone was heard to proclaim: "Blessed is he that giveth a cup of water in My name."

And the possession of a dipper blazing with diamonds is in that country a sure badge of royalty; for no one can buy or receive one as a gift, nor can fathers bequeath them to their children. Each child is given a tin dipper at its birth, and only by purely unselfish acts can a diamond one be wrought.

Some of the foolish people have not yet learned its secret, and they go about trying to exchange their tin for silver by doing kind deeds. Sometimes they accuse the Father of All very bitterly because they grow old possessing only tin dippers; for the secret of the exchange can no more be told than the beautiful, flashing, sparkling diamonds can be purchased. Sometimes there are great surprises, when people give up the hope of such a possession and forget themselves; for then they often find the castaway tin bearing evidence in silver, gold, or even diamonds, that they have become royal; but by that time they have no vanity because of their fortune. Only modest, thankful, brave, happy feelings possess the owners of diamond dippers.

The Lady Moon now lifted a white finger toward the east, which was growing rosy, and the baby stars all knelt a moment, looking like white-robed nuns at prayers. Then the morning wind swept aside the great blue silken curtain of the sky, and the Moon followed her children into Heaven, to do whatever the Father had planned for them while they were out shining for His earth children.

The Rainbow Queen.

A great many years ago, when even grown-up people were not very wise, they used to look up to the mountains and wonder if their tops reached the sky. Sometimes a big cloud would rest upon a mountain-top, and when the sun shone upon it this cloud would look like gold. Sometimes rain would fall from the cloud, even when the sun shone upon it, and then the beautiful rainbow would shine out.

By and by these people, called Greeks, began to think that a great king dwelt upon the mountain-top. They named this king Jupiter. They thought the golden cloud was his palace. Of course, there was a beautiful queen in the golden palace; they named her Juno.

This queen had many princes and princesses about her, who loved her and were always glad to serve her; but of all the princesses, none was so beautiful

as Iris. For her the queen made a rainbow bridge, and no one but Iris was allowed to step upon the beautiful arch. There are many Greek stories about this princess and her journeys to the earth over the rainbow bridge. One of them is about a flower that is named after her.

Iris.

Princess Iris loved the waters of the earth, for in them she could always see the bright rainbow colors of her own magic bridge. One day she wished to come down, to wander by the bright waters of the rivers and lake. So she wrapped herself in a red and purple cloud, and stepped into her golden chariot drawn by two handsome peacocks, whose splendid tails spread out in the sun and shone like the colors in the rainbow itself. On her way, she shook water-drops from the clouds to see them sparkle in the light, as they went splashing down upon the earth.

Down she came to the earth, and by the side of a lake she stepped from her golden chariot. Here she found blue flowers, growing stately and tall. "As blue as the blue waters of the sea," she cried. She bent over the bright blue flowers, and touched their petals. Down from her hair the rain drops fell; straight down upon one petal of every flower. And there they are sparkling and shining to this very day, showing the colors of the rainbow when the warm sun shines down upon it.

COMMON IRIS.

Soon after that some children went down to the water to play. "See, see!" they cried, "a blue flower, as blue as the blue in the rainbow. Iris herself must have been here. Here are her own beautiful colors." And so to this day the tall blue flower that grows by the water's edge, half hidden among its own sword-like leaves, is called Iris, in memory of Iris, "the rainbow queen."

The Boyhood of Jesus.

Nazareth, the boyhood home of Jesus, is a city of Galilee, in the northern part of the Holy Land.

The valley of Nazareth is very beautiful. Vine-yards clothe the hills round about, with dark cypress trees scattered among them. In the valley there are waving fields of grain, and pastures where the lily and anemone grow. Around the city there are groves of fig-trees, citron, and pomegranates. At the foot of a hill, a strong spring gushes forth. There to this day the women and maidens of Nazareth come to draw water, and then bear their pitchers home on their shoulders or on their heads. Even so Mary went forth from the humble abode of Joseph, the carpenter, leading the Boy Jesus by the hand, to fill her pitcher at the spring.

How do you suppose the house looked in which Jesus and Mary and Joseph lived? I suppose it looked just like many houses to be seen in Nazareth today,—plain, one-story buildings with flat roofs, built of stone and painted white on the outside. In the spring-time every house in Nazareth is like a bower, for the vines

creep all over the walls and cover them with garlands of green leaves. Behind the house, or somewhere near it, must have been Joseph's carpenter-shop.

A carpenter was Joseph. Yet he had returned to Nazareth richer than when he left it with Mary, to be taxed at Bethlehem. They had brought with them the Child born in the stable at Bethlehem, who had been declared by Simeon to be the Redeemer of Israel, and who had been worshipped by the shepherds and the Wise Men of the East. The Child, as it grew older, was a pattern for all children, rich or poor. No unkind thoughts were ever in His heart. No untruthful words ever came from His lips. He never quarreled with His playmates. In all things He was obedient to His parents, and kind to all around Him.

Jesus employed in the Workshop of Joseph.

We wonder how the boyhood of Jesus was passed. We should like to know what He said, what He felt, especially about the world He had come to save. We should like to know what thoughts He had when He saw little children of His own age do wrong, and what He said to them. We should like to know a story from His life when He was four years old and one when He was five, and when He was a little lad of six, and seven, and then when He was eight years, and of the things He said and did when He was a boy of nine and ten. But these questions cannot be answered. We know nothing of all these years, except that the Child Jesus had no sin, as other children have, and that He grew, and waxed strong in spirit, and filled with wisdom, and was beloved of God and men.

Now it was the custom among the Jews for all grown-up men to make a journey every year to Jerusalem to worship in the holy temple there, and to hold a solemn feast in remembrance of the day when their forefathers had been delivered out of the land of Egypt. That was the Feast of the Passover. Many of the men would take their wives with them to Jerusalem, and when boys had reached the age of twelve years, they were taken to the temple services, to hear the singing of the psalms of praise, and to see the offerings brought by the worshippers.

The journey from Nazareth to Jerusalem was a long one, but it happened at a good season of the year, after the summer's heat, and before the winter rains began to fall.

So Joseph took with him Mary and her Child, when Jesus was twelve years of age. They set out from Nazareth with a large number of friends, relatives and neighbors. After several days walking they reached a hill, from the top of which they could get the first sight of Jerusalem. And a wonderful sight it was. Jerusalem at the time was a grand and beautiful city, with towers of white marble gleaming among the trees, and a number of great palaces scattered among the densely built-up slopes of the Holy City. Above all shone the great golden roof of the temple on Mount Moriah.

The city was crowded with strangers, who had come from all parts of the world to celebrate the Passover. It was necessary at such times for many people to encamp outside the city in the open fields, living in tents of willow stems, during the time of the feast.

The feast lasted eight days. Then most people hastened home to return to their daily tasks. Joseph and Mary, too, left Jerusalem to return to Nazareth.

But before they had gone very far, they noticed that the Child Jesus was not in their company, and they were filled with great alarm.

They went round to all their friends and relatives, but Jesus was not among them, nor could anyone tell them where He might be found. Then Joseph and Mary went back to Jerusalem, and there looked for Him everywhere. They looked for Him at places which they had visited together, they roamed through the entire city, but found Him not. Did they see a boy of about His age and looks at the end of some narrow street, or on a corner of the market-place? They would push their way through the crowds, but when they came close by they would say: "No, that is not our Jesus; oh, where can He be, where can He be?"

On the third day, they found Him! And where, do you suppose? In the temple!

Really, was not that the place where they should have looked for Him when they began their search? For, was this not the Lord's house? Where would

Jesus said: "Whosoever shall humble himself as this little child, the same shall be the greatest in heaven."

they have been more apt to find Him, than in the house of His Heavenly Father?

There, in the temple court, they saw the Child Jesus. He was among a crowd of learned Jewish rabbis or teachers, and was asking them questions, and answering their questions in return. These men were deeply learned in the Word of God. But the Boy Jesus knew so much more than the learned rabbis, that all who heard Him were filled with wonder and awe.

"Never was there a boy who could answer us as this Boy does; and no one has ever asked us such deep questions. Why," they had to admit, "this Boy of twelve knows more about the holy law and will of God than any one of us!"

Then Joseph and Mary appeared. "There He is!" "Where?" "Among the rabbis over yonder!"

You may be sure that they clasped Jesus to their heart when they found Him again, and were very happy. But Mary could not help asking Him: "Son,

why have You treated us so? We have looked for You in great sorrow, thinking You were lost."

Jesus answered: "How was it that you sought Me? Did you not know that I must be in My Father's house?"

Then He returned to Nazareth with Joseph and Mary, and, as ever before, was obedient to them in all things. As He grew older, He grew greater in wisdom, and in favor with God and men. And all the words He spoke, Mary kept in a faithful, believing heart.

The Prodigal Son.

Here is a pretty story of forgiveness that Jesus told to the people.

A certain man had two sons; one was idle and discontented, but the elder was a good son, and worked industriously in his father's fields.

One day the idle son said: "Father, give me all that belongs to me." And the father did so.

Not long after, this son left his father and brother, and went away into a far country.

"I can work or be idle now, just as I like," he said. But he did no work at all.

And soon he became poor and ragged, and was only too glad to take care of some swine.

Then he began to think of his father, and to wish he were back with him again. At last he was so miserable and unhappy that he said:

"I will arise, and go to my father, and will say unto him, 'Father, I have sinned against Heaven, and before thee, and am no more worthy to be called thy son; make me as one of thy hired servants.'"

So he went back. But as soon as the kind father saw his son coming along the road, he ran gladly to meet him, and kissed him, and took him into his house, and made a great feast to welcome him.

"You have never made a feast like this for me," cried the elder son, when he returned from work in the fields.

"Son, you have never left me," said the father; "but your poor brother was lost, and is found!"

The Bower Bird.

In Australia and New Guinea there is a bird which not only builds a house but has a garden, too. He is sometimes known by the name of Garden Bird.

When he is going to build, the Bower Bird first looks for a level spot of ground which has a shrub in the center. Then he covers the bottom of the stem of this shrub with a heap of moss. Next he brings small green twigs from other plants; these he sticks in the ground so that they lean against his shrub. On one side he leaves a place open for the door. The twigs keep on growing so that his little cavern is like a bower.

Last of all in front of the door, the bird makes a lawn of moss. Upon this lawn he scatters purple berries and pink flowers, and these he always keeps fresh.

He is about as large as a thrush or blackbird. His head, his back, his wings and tail are satin-black, and beneath he is greenish red.

RETURN OF THE PRODIGAL SON TO THE HOUSE OF HIS FATHER.

The Resurrection of Christ.

The night when Jesus was crucified, a rich man, Joseph of Arimathea, and another, named Nicodemus, took Christ's body down from the cross, and buried it in a cave in a beautiful garden.

And to make sure that the disciples should not remove their Master during the night, and pretend that He had risen from the dead, Caiaphas sent soldiers to see that none came near the tomb.

So all night long the soldiers paced up and down that quiet garden, thinking, perhaps, what a foolish thing Caiaphas had sent them to do. But suddenly, at daybreak, the earth shook, and the stone before the tomb was rolled away.

"Look! look!" cried one in amazement. "Is not that an angel seated upon the stone?"

"Yes! It is a spirit—an angel!" said another. And they were all so frightened that they ran back to Jerusalem to tell Caiaphas what they had seen.

The Chrysanthemums, or Christ Flowers.

It was Christmas Eve in the Black Forest. The whirling snow touched the tree tops; the starry flakes clung to the branches or fluttered down, pure as rose petals wafted about by the breath of angels. Soon the frozen earth was hid from view and a great white world waited, in solemn expectation, the coming of the Christ-Child. Silence lay upon the forest. The charcoal burners tended their smoldering fires and dreamed of home or, with simple faith, listened for the shepherds' message and the angels' song.

When the midnight hour was nigh, a sound broke the stillness, the wail of a child in distress.

"'Tis the cry from Bethlehem," said Johann reverently. "The Christ-Child is born."

"No child of the Black Forest would be about to-night?" asked Hans, uneasily. "It might not be one of our little children?" "Not so," said Michael; "content thee, Hans, thy little ones, snug in their cot, dream of the angels, while thy good *frau* guards their sleep. It is as Johann says, 'the echo from Bethlehem.'"

Hans was silent, but presently stole away into the snow-wreathed depths of the forest. A voice in his heart was urging him on.

"May the star of Bethlehem guide me aright," he prayed. "If a child be abroad this holy night, lead me, dear God, to Thy little one." Again the wail of distress smote upon his ear; a sob was the answer to his prayer; and stooping down, the charcoal burner lifted from the snow a babe scantily wrapped in swaddling clothes. It's feeble strength was almost spent, so placing it in his breast, Hans sped through the forest toward his home.

The *hausmutter* sat by her babes, her face, beautiful with mother-love, radiant in the glory of the Christmas lights burning on the humble tree, and so Hans found her.

"I have brought thee one more, Gretchen," he said, as he placed the babe on her bosom. "Succor it for the Christ-Child's sake."

"Who was born to-night," answered the mother gently, and her love flowed out to the waif, warming it back to life.

The slumbering children stirred and wakened, and seeing the stranger, rose from their cots, and presently the hut rang with their rejoicing. The lights on the tree twinkled like stars. The children bore their guest toward it, loaded him

"Suffer little children to come unto me, and forbid them not: for of such is the kingdom of heaven."

with choicest gifts, and played about him merrily, Hans and Gretchen looking on, a great content in their hearts. Suddenly a radiance, not of earth, illumined the humble abode; the waif was encircled by a glory that deepened and spread, till the charcoal burner's hut became as an ante-chamber of heaven. Hans and Gretchen fell on their knees in adoration. The Babe they had harbored was passing from their vision, floating upward as if borne by angels' wings. His tiny hands outspread in parting benediction. The children wept for the loss of their playmate.

"Hush thee, my darlings," whispered the mother. "Know you 'twas the dear Christ-Child, who came to us and hath returned to Heaven. To-morrow thy father shall show thee the spot where he found the Holy Babe."

When the morrow came Hans led the little ones into the forest and where had been a bed of snow, lo! flowers bloomed, great waxen blossoms with hearts of gold and petals like silken floss!

"The Christ flowers!" cried Gretta, and kneeling before them, as at a shrine, the peasants solemnly recorded a vow to succor each Christmas day some poor child in honor of the Holy One, who had been their guest.

And so, in the Black Forest, is still held this legend of "How the Chrysanthemums or Christ Flowers Came."

The Hoopoe.

In all your travels I dare say you never saw this singular-looking bird, the hoopoe, and you will be obliged to go a long distance to find one, as far as Africa or the Indian archipelago. If you find these names on your map, you will not forget the home of the hoopoe.

What makes this bird so different from all others is his beautiful crest of tall feathers. These feathers stand out on top of his head like an open fan, and he carries his crest in a very stately way, so he must feel quite proud of it. Now you have often heard that fine feathers make fine birds, and this is the case with this bird. He is handsome because his feathers, and especially the feathers on his head, are so fine, although his bill and his legs are of a bright coral-red color,

THE HOOPOE.

You see, he can be proud of his feet, as well as his head. His bill is quite long, and he can dig in the ground for worms as well as you could dig with a spade, and perhaps a great deal better. He has a way of puffing his neck until it becomes quite large, and then he utters a sound—hoo—hoo—hoo—very rapidly. The only change he ever makes in his note is hoh—hoh—hoh, and this he says when he is angry or disturbed. But when he is in a good humor he will say his hoo—hoo—hoo very softly and smoothly.

When you visit a place where there is a large collection of birds, ask to see the hoopoe.

Child Welfare

WE SOW a thought and reap an act; we sow an act and reap a habit; we sow a habit and reap a character; we sow a character and reap a destiny.—*Thackeray.*

To train a child from babyhood until it reaches the adult years is the most responsible work of the mother and teacher. No ambition is greater than the desire to see the infant pass from one period of life to another, from the stage of infancy through the period of boyhood and girlhood, until the highest possibilities have been attained. In this momentous labor, this highest of all our ambitions, we need to summon all our mental and moral powers.

The Innocence of Childhood.

The first and simpler step is physical self-control, but the world of duties and obligations, the expanse of possibilities that lie beyond, are limitless and almost incomprehensible. What can be done to turn playful activities into habits of industry? How are we to deal with mischief and fighting? Shall nature study and character building be permitted to lag behind or be overlooked until it is too late? These and other questions equally vital are before every mother and every teacher. In these respects the subjects treated in this work are a source of great value, a fountain of help and information. Consult frequently the following:

Abacus.
Abstraction.
Animal Intelligence.
Association.
Attention.
Blushing.
Child Study.
Conception.
Conscience.
Consciousness.
Correlations.
Education.
Fine Arts.
Food.
Imagination.
Induction.
Intuition.
Jesus Christ.
Kindergarten.
Memory.
Mind.
Nature Study.
Pedagogy.
Perception.
Psychology.
Reading.
Reflection.
Religion.
Schools.
Sensation.
Soul.
Voice.
Will.

Using the Child Training Chart.

No definite rule can be laid down which will answer the needs and possibilities of all children. Every person has individual traits, hence each must be treated and trained with that fact in mind, but the chart is a reliable guide in the art of child training when applied to the world of children as a whole. The four successive stages of the child are considered,—including Infancy, Early Childhood, Advanced Childhood and Early Youth. These periods embrace the years when right ideas are to be inculcated, when forethought, habits and character are to be produced.

Calendar of Years.

First study the child and learn all you can about its capabilities and present attainment. Then turn to the chart, to the year of the present age of the child, and notice the items suggested under each of the six headings, which embrace

Character Building, Study, Science, Art, Exercises and Games, and Sleep and Rest.

It is necessary for the mother and teacher to encourage every good trait all the time, both by precept and good example. This must not be forgotten, must not be neglected, because the ability and natural inclination of children differ so much in different individuals that no inflexible rule can govern all alike.

Patience is a great virtue in every stage of child welfare. Some children have a lack of normal understanding; they may have the latent powers, the desired possibilities, but they must be treated as their ability and understanding justify. Frequently such children have the redeeming quality that they are more obedient or more easily led than those who are brighter and more active.

It is necessary to be companionable to the child in all the pleasures that can be shared, in all the activities in which effort can be made mutual. It is well to encourage conversation, to talk frequently and freely with the child. The objects of such talks should be largely to learn what is of interest to the child, whether games, reading, walks, picnics, work of different kinds, etc., furnish right action and enjoyment. Confidence and good will are implements of no mean account to be acquired and both are necessary in order to do the work of training well.

Children must be taught to think for themselves, to use their own judgment and to be self-reliant. Tests of their ability to do this must be made and, as they become more and more capable to act, they need to be put upon their own responsibility.

Obedience must be prompt and willing. While the reason for certain action should be given, it is not wise to discuss your decision of the action you expect. If discussion under these circumstances is tolerated, if the matter of obedience is permitted to be a ground for discussion, the desired development may turn out to be lost. Children under these circumstances will become argumentative and disobedient.

The first five years children are impressed in an unusual way by their environments and they are inclined to do what they see done, to be interested in the things that appeal to others. The next five years they prefer to choose their own occupations, rather than to leave them to the choice of others. This tendency grows as they increase in years, and after the tenth year they prefer to choose their companions and their occupations for themselves.

While the home is the strongest influence of childhood and youth, it is gradually modified or supplemented by the school and the church as the child grows older. The personal behavior of the parent, however, always is the strongest influence upon the child, being most effective in the earlier years.

To keep children occupied is important above all else. It will aid in keeping the mind pure and in furnishing interesting thought and wholesome employment; it will keep them from objectionable companions and innumerable unwholesome environments. Their friends and pleasures should be brought to the home, they should be chosen for them in many instances, making it possible to know with whom to associate and in what way their recreation hours are spent. Consult the chart frequently.

Character Building.

The chart contains many virtues to be inculcated from early childhood. These include self-control, obedience, generosity, patience, truthfulness, self-respect, patriotism, helping others, etc. Many of these terms are synonomous; that is, they are different words or names for the same virtue, and above all others stands the necessity of kindness, self-control, reverence, etc.

Study and Occupation.

This portion of the chart suggests the exercise of the mind, what and how to study at the different ages. There must necessarily be a certain degree of physical development before any progress can be made along mental or moral lines.

Gradually as these powers develop, such as seeing, talking, reading, etc., it becomes possible to introduce larger action in the expanse of mind and soul.

Every home requires good books suitable to the age and attainment of children. At first the parent needs to teach the learners to become interested, at first to listen and later to read orally. Finally, children should practice silent reading, which is of course the more important of the two classes. Ideals are formed and latent powers are called into action by a study of great minds, such as those we come in contact with by reading good literature.

Science in Its Varied Forms.

The chart suggests many themes for study in science, especially such truths as are new and useful to the learner. The list of topics under each department should be used with the full understanding that the steps to be taken must be suitable to the child. The purpose is to suggest such subjects as are useful and which will serve to engage the attention of the learner.

Art and Related Themes.

It will be noticed that the chart begins with the ideas of distinguishing light and sounds. These are the first steps in art and they need to be taken with the greatest possible precaution, else both the sight and hearing may be impaired. The succeeding topics explain themselves and embody much in art that every child should learn. The question of the teacher must ever involve the ability of the child to understand and assimilate.

Exercises and Games.

The list of suggestions which come under this heading are manifold. The purpose is to supply such occupation as is needed to engage the interest and furnish wholesome employment. At first the exercise must be planned wholly to develop the body and mind, but later points of utility should be added; that is, the employment should be of such a character that it will add to the comforts of the home. In other words, the child should as early as possible learn to dress, help to do the work and become able to produce things of practical value. The age of five years is not too early for the child to have duties in the home, but with these labors at the appropriate time each day should be plenty of exercise in fresh air and suitable games and amusements.

In the Open Air.

Sleep and Rest.

Fatigue often causes mischief and disobedience. This heading is intended to supply sufficient relaxation for the average child. Whether work, rest or recreation are needed, when they are necessary, must be referred largely to the parent who has control of the learner. The nervous child may need solitude at the time when others should be at work or at play with companions. Here the parent needs to exercise judgment, taking into account the age and ability of the child, but in general the chart will be a reliable guide.

LIFE'S LESSON.

While yet a child, on ocean's shore,
I gazed across the restless sea;
I heard the music of its roar
And wondered what it meant to me.

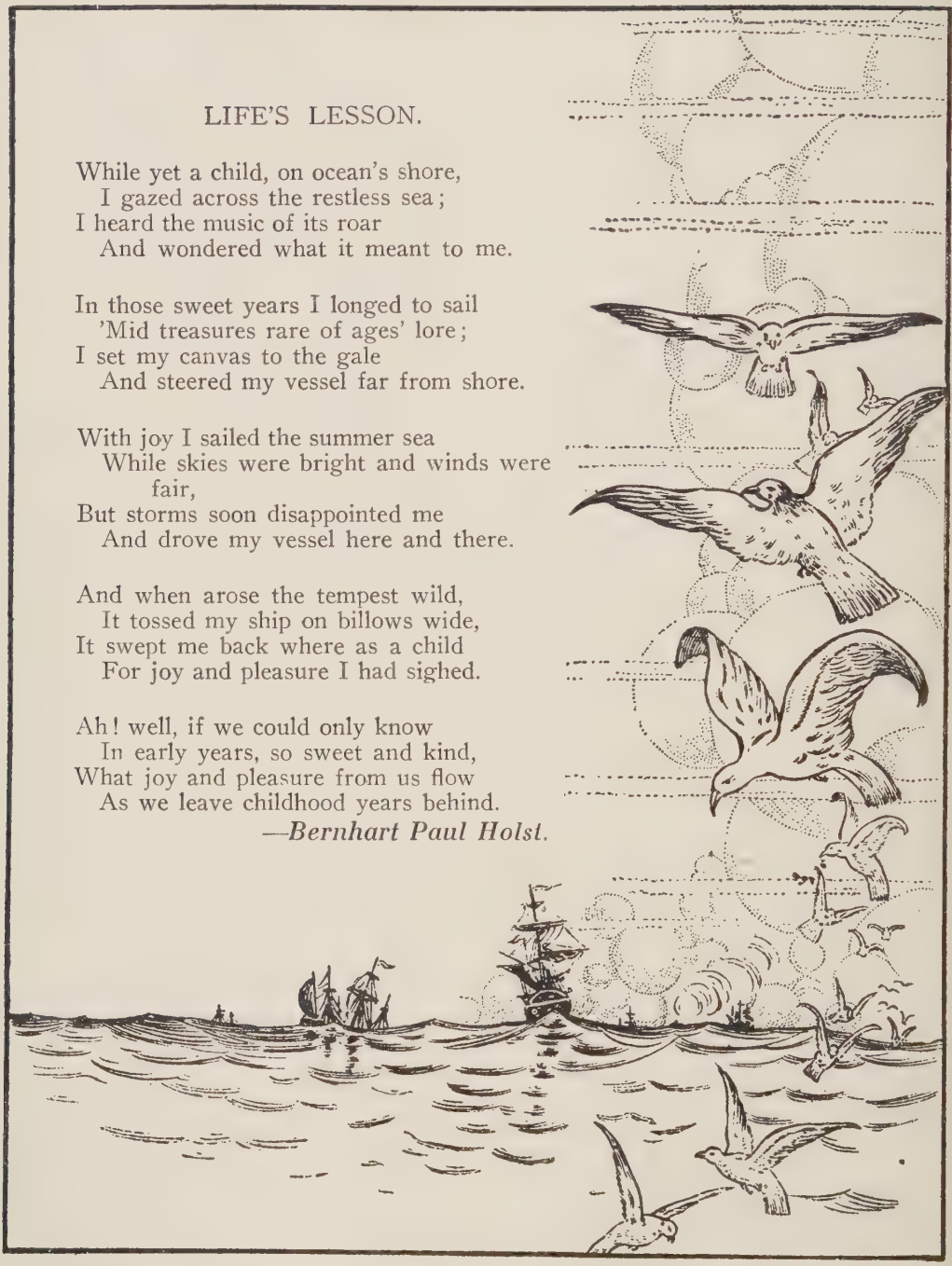
In those sweet years I longed to sail
'Mid treasures rare of ages' lore;
I set my canvas to the gale
And steered my vessel far from shore.

With joy I sailed the summer sea
While skies were bright and winds were fair,
But storms soon disappointed me
And drove my vessel here and there.

And when arose the tempest wild,
It tossed my ship on billows wide,
It swept me back where as a child
For joy and pleasure I had sighed.

Ah! well, if we could only know
In early years, so sweet and kind,
What joy and pleasure from us flow
As we leave childhood years behind.

—Bernhart Paul Holst.



Child-Training Chart.

Infancy.

(From birth to the age of three years.)

Age: Year of Birth.

1. Character Building.
   a. Self-control.
   b. Submission.
   c. Obedience.
2. Study.
   a. Feeling.
   b. Seeing.
   c. Listening.
3. Science.
   a. Idea of direction.
   b. Idea of distance.
   c. Qualities of things.
4. Art.
   a. Distinguishing degree of
      1. Light.
      2. Sounds.
   b. Cultivate gentle voice.
5. Exercises and Games.
   a. Teach hygienic habits.
   b. Cultivate use of muscles.
   c. Crawling.
   d. Play with ball.
6. Sleep and Rest.
   a. Sleep 22 hours daily, which diminish to 15 hours daily.

Age: 1 Year.

1. Character Building.
   a. Self-control.
   b. Imitation.
   c. Reasonableness.
2. Study.
   a. Talking.
3. Science.
   a. Perception of rhythm.
   b. Idea of causes.
   c. Idea of effects.
   d. Idea of number and quantity.
4. Art.
   a. Sing lullabys.
   b. Induce calmness.
5. Exercises and Games.
   a. Walking and standing.
   b. Using blocks, rings, etc.
   c. Imitative movements.
   d. Use of spoon and bowl.
6. Sleep and Rest.
   a. Sleep: 6 p. m. to 6 a. m.
   b. Rest: 4 to 2 hours.

Age: 2 Years.

1. Character Building.
   a. Self-control.
   b. Generosity.
   c. Courage.
   d. Gentleness.
2. Study.
   a. Picture books.
   b. Mother Goose stories.
3. Science.
   a. Idea of time (past, present and future).
   b. Reasons for things.
   c. Idea of relations.
4. Art.
   a. Undressing.
   b. Stringing beads.
   c. Idea of tastes and colors.
   d. Sewing cards.
5. Exercises and Games.
   a. Plays with fingers.
   b. Animal toys.
   c. Rolling ball.
6. Sleep and Rest.
   a. Sleep: 6 p. m. to 6 a. m.
   b. Rest: 4 to 2 hours.

Early Childhood.

(From three to the age of six years.)

Age: 3 Years.

1. Character Building.
   a. Patience.
   b. Cheerfulness.
   c. Kindness.
   d. Politeness.
2. Study.
   a. Use of alphabet blocks.
   b. Learn days of week.
   c. Listen to short stories and verses.
   d. Learn and recite verses.
3. Science.
   a. Count to ten.
   b. Idea of growth.
   c. Learn right and left.
   d. Distinguish fact from fancy.
4. Art.
   a. Learn to dress.
   b. Paper cutting.
   c. Reproduce singing tones.
   d. Distinguish smells.
5. Exercises and Games.
   a. Play at sandpile.
   b. Ride hobby horse.
   c. Alphabet blocks.
   d. "Button, button," etc.
   e. Helping others.
6. Sleep and Rest.
   a. Sleep: 6 p. m. to 7 a. m.
   b. Rest: 3 to 1 hours.

Age: 4 Years.

1. Character Building.
   a. Unselfishness.
   b. Neatness.
   c. Truthfulness.
2. Study.
   a. Hear fairy tales read aloud.
   b. Print with pencil.
   c. Learn names of the month.
3. Science.
   a. Add and subtract numbers.
   b. Write Arabic numbers.
   c. Learn to count.
   d. Names of birds and flowers.
4. Art.
   a. Sing the musical scale.
   b. Learn use of simple tools.
   c. Pass from kindergarten to sewing cloth, etc.
   d. Coloring pictures.
5. Exercises and Games.
   a. Help in kitchen.
   b. Make presents for friends.
   c. Swing and mud pies.
   d. Ride the tricycle.
6. Sleep and Rest.
   a. Sleep: 6 p. m. to 7 a. m.
   b. Rest: 3 to 1 hours.

Age: 5 Years.

1. Character Building.
   a. Self reliance.
   b. Independence.
   c. Trustworthiness.
2. Study.
   a. Reading and writing.
   b. Memorizing.
   c. Learn stories of heroes.
   d. Studying proportions.
3. Science.
   a. Ideas of birth and death.
   b. Uses of maps and plans.
   c. Names of insects, trees, flowers and grasses.
4. Art.
   a. Weaving and pasting.
   b. Dressing and undressing.
   c. Singing with family.
5. Exercises and Games.
   a. Marching to music.
   b. Driving hoop.
   c. Climbing ladders and trees.
   d. Dusting, brushing and sweeping.
   e. Taking walks.
6. Sleep and Rest.
   a. Sleep: 6 p. m. to 7 a. m.
   b. Rest: As necessary.

Advanced Childhood.

Age: 6 Years.

1. Character Building.
   a. Punctuality.
   b. Personal responsibility.
   c. Reserve in personalities.
2. Study.
   a. Spelling, letter-writing.
   b. Reading good stories.
   c. Silent reading.
   d. Use of the typewriter.
3. Science.
   a. Telling time on clock.
   b. Use of maps and the globe.
   c. Lessons in simple botany.
   d. Counting numbers to 100.
4. Art.
   a. Knitting and tracing.
   b. Singing by note.
   c. Use of hammer and saw.
5. Exercises and Games.
   a. Helping at work.
   b. Jumping rope.
   c. Roller skating.
   d. Swimming and rowing.
   e. Doing constructive work.
6. Sleep and Rest.
   a. Sleep: 6:30 p. m. to 7 a. m.
   b. Rest: As needed.

Age: 7 Years.

1. Character Building.
   a. Self-respect.
   b. Respect for others.
   c. Obedience to superiors.
2. Study.
   a. Reading school lessons.
   b. German language.
   c. Listening to reading of suitable books.
3. Science.
   a. Collecting leaves.
   b. Making outline maps.
   c. Elements of hygiene.
4. Art.
   a. Hemming and crocheting.
   b. Elementary modeling.
   c. Sight singing.
5. Exercises and Games.
   a. Doing chores.
   b. Skating; bicycling.
   c. Digging and hoeing.
   d. Pulling weeds.
   e. Playing with ball and bat.
6. Sleep and Recreation.
   a. Sleep: 7 p. m. to 7 a. m.
   b. Recreation: Riding.

Age: 8 Years.

1. Character Building.
   a. Personal refinement.
   b. Loyalty to others.
   c. Willingness to serve.
2. Study.
   a. Reading folklore.
   b. Mythological stories.
   c. Stories from the Bible.
3. Science.
   a. Collecting flowers.
   b. Observe and study insects.
   c. Elementary physiology.
4. Art.
   a. Drawing objects.
   b. Cutting wood.
   c. Simple cooking.
   d. Special musical instrument.
5. Exercises and Games.
   a. Marbles, dominoes.
   b. Sweeping with broom.
   c. Driving dog or pony.
   d. Weeding in garden.
6. Sleep and Recreation.
   2. Sleep: 7 p. m. to 7 a. m.
   b. Recreation: Riding.

Age: 9 Years.

1. Character Building.
   a. Preciseness.
   b. Personal honor.
   c. Sense of duty.
2. Study.
   a. Stories of pioneers.
   b. Geographical readings.
   c. History of our country.
3. Science.
   a. Collect specimens of natural history.
   b. Mineral specimens.
   c. Elementary zoology.
4. Art.
   a. Carpentry.
   b. Darning and mending.
   c. Color work.
   d. Afternoon concerts.
5. Exercises and Games.
   a. Ironing.
   b. Washing dishes.
   c. Care of animals.
6. Sleep and Recreation.
   a. Sleep: 7:30 p. m. to 7 a. m.
   b. Recreation: Riding.

Age: 10 Years.

1. Character Building.
   a. Patriotism.
   b. Respect for law.
   c. Perseverance.
   d. Reverence.
2. Study.
   a. Use of reference books.
   b. Reading ancient history.
   c. Composition writing.
3. Science.
   a. Collection of stamps.
   b. Clippings from newspapers.
   c. Read stories of inventions.
4. Art.
   a. Type and printing press.
   b. Basket making.
   c. Care of doll's clothes.
5. Exercises and Games.
   a. Practice archery.
   b. Homework.
   c. Milking, collecting eggs.
   d. Flying the kite.
6. Sleep and Recreation.
   a. Sleep: 8 p. m. to 7 a. m.
   b. Recreation: Walking.

Age: 11 Years.

1. Character Building.
   a. Steadfastness of purpose.
   b. Loyalty to principle.
   c. Willingness to endure.
2. Study.
   a. History of Greece.
   b. Keeping a daybook or diary.
   c. Read romances of history.
3. Science.
   a. Elementary chemistry.
   b. Study simple physics.
   c. Use of physical apparatus.
4. Art.
   a. Work in wood.
   b. Embroidery work.
   c. Singing musical parts.
5. Exercises and Games.
   a. Cutting grass.
   b. Mending clothes.
   c. Baseball, hockey.
6. Sleep and Recreation.
   a. Sleep: 8 p. m. to 6:45 a. m.
   b. Recreation: Sight seeing.

Early Youth.

Age: 12 Years.

1. Character Building.
   a. Being gallant.
   b. Manly traits.
   c. Womanly characteristics.
2. Study.
   a. Reading a foreign language.
   b. Writing compositions.
   c. Impersonating literary characters.
3. Science.
   a. Elements of algebra.
   b. Sex in plants.
   c. Keeping accounts.
4. Art.
   a. The turning lathe.
   b. Constructive sketching.
   c. Scroll sawing.
5. Exercises and Games.
   a. Crochet and tennis.
   b. Hoeing in garden.
   c. Cleaning walks.
   d. Serving and cooking.
6. Sleep and Recreation.
   a. Sleep: 8 p. m. to 6:45 a. m.
   b. Recreation: Visiting.

Age: 13 Years.

1. Character Building.
   a. Being sociable.
   b. Frankness in conversation.
   c. Sense of public honor.
2. Study.
   a. Study of poets.
   b. Roman history.
   c. Latin.
3. Science.
   a. Effect of heat on plants.
   b. Record of weather, etc.
   c. Elements of physical geography.
4. Art.
   a. Stone cutting.
   b. Burning and carving wood.
   c. Study great artists.
5. Exercises and Games.
   a. Care of house and barn.
   b. Checkers; golf.
   c. Fancy dancing.
6. Sleep and Recreation.
   a. Sleep: 8:30 p. m. to 6:45 a. m.
   b. Recreation: Outdoor exercise.

Age: 14 Years.

1. Character Building.
   a. Conduct at home.
   b. Regard for opinions.
   c. Spirit of democracy.
2. Study.
   a. Reading masterpieces.
   b. Studying great orations.
   c. General history.
3. Science.
   a. Discuss ideas of causes and effects.
   b. Hygiene and physiology.
   c. Elements of geometry.
4. Art.
   a. Constructive drawing.
   b. Study famous paintings.
5. Exercises and Games.
   a. Running, jumping, etc.
   b. Bicycle racing.
   c. Excursions to study nature.
   d. Evening game parties.
6. Sleep and Recreation.
   a. Sleep: 9 p. m. to 6:45 a. m.
   b. Recreation: Outdoor exercises.

Age: 15 Years.

1. Character Building.
   a. Moral responsibilities.
   b. Value of social relations.
   c. Cultivation of friends.
2. Study.
   a. Simple essays.
   b. French language.
   c. Plays: Comedy and romances.
3. Science.
   a. Elements of astronomy.
   b. Chief stars and constellations.
   c. Elementary geology.
4. Art.
   a. Work in designing pictures, buildings, etc.
   b. Designing decorations.
5. Exercises and Games.
   a. Plowing.
   b. Driving two horses.
   c. Basketball; football.
6. Sleep and Recreation.
   a. Sleep: 9 p. m. to 6:45 a. m.
   b. Recreation: Excursions to study nature.

Age: 16 Years.

1. Character Building.
   a. Prizing friends.
   b. Loyalty to ideals.
   c. Helping others.
2. Study.
   a. Reading English and other languages.
   b. Lecture; biographies
   c. Evening theaters.
3. Science.
   a. Photography.
   b. Telegraphy.
   c. Solid geometry.
4. Art.
   a. Voice culture.
   b. Singing and speaking.
   c. Evening concerts.
5. Exercises and Games.
   a. Tramps across country.
   b. Art of housekeeping.
   c. Evening parties.
6. Sleep and Recreation.
   a. Sleep: 9:30 p. m. to 6:45 a. m.
   b. Recreation: Walks in open country.

Age: 17 Years.

1. Character Building.
   a. Duties to civilization.
   b. Responsibility toward humanity.
   c. Choosing an occupation.
2. Study.
   a. Poets and essayists.
   b. Civil government.
   c. Recent literature.
3. Science.
   a. Reading scientific works.
   b. Consulting reference books.
   c. Trigonometry.
4. Art.
   a. Evening concerts.
   b. Private theatricals.
   c. Impersonations.
5. Exercises and Games.
   a. Military drills.
   b. Camping out alone.
   c. Lunch parties.
6. Sleep and Recreation.
   a. Sleep: 10 p. m. to 6:45 a. m.
   b. Recreation: Occasional late hours.

1. Character Building.
   a. Social relations.
   b. Regard for public welfare.
   c. Idea of self-culture.
2. Study.
   a. Literature and art.
   b. Problems of sociology.
   c. National development.
3. Science.
   a. Farm husbandry.
   b. Biology.
   c. Domestic science.
4. Art.
   a. Critical music.
   b. Charity concerts.
   c. Culture of singing voice.
5. Exercises and Games.
   a. Housekeeping.
   b. Office work.
   c. House parties.
6. Sleep and Recreation.
   a. Sleep: 10 p. m. to 6:45 a. m.
   b. Recreation: Occasional late hours.

Two Roses.

At early morn two roses
  Bedecked with sparkling dew
Had blown in blushing beauty,
  No finer ever grew,
    No finer ever grew.

I waited till the noontide,
  The bloom had larger grown,
But still I could not pluck them
  And left them there alone,
    And left them there alone.

At eve the bloom had wilted
  With petals shrunk and torn,
And sadly I regretted
  That I was left forlorn,
    That I was left forlorn.

And let this be a lesson
  To my friends kind and true,
That we should pluck the roses
  In early morning dew,
    In early morning dew.

—*Bernhart Paul Holst.*

The Great European War.

THE Great European War had its beginning on July 23, 1914, when Slavs at Bosna-Serai, the capital of Bosnia, assassinated Archduke Francis Ferdinand, the heir apparent of Austria-Hungary. It had been long predicted that a great war would be fought in Europe, hence there was no surprise when the conflict began, although no one had thought that the small state of Bosnia would be the first point of disturbance.

The assassination of Archduke Francis Ferdinand and his consort, Sophia Chotek, duchess of Hohenberg, by Slavs was the beginning of a controversy between Austria-Hungary and Servia; the latter country accused Servia of being responsible for the crime and Austria-Hungary in an ultimatum demanded satisfaction; war was declared against Servia July 28, 1914. This caused a general mobilization by Russia in defense of Servia. After a line of official correspondence between Russia and Germany, owing to the fact that Russia was mobilizing and concentrating forces on the frontier of Germany, the latter country, on August 1, 1914, declared war against Russia, and two days later, on August 3, Germany also declared war against France. On August 5, England declared war against Germany and other countries soon took sides with one or the other of the belligerents.

In the early part of the war the Central Powers consisted of Germany, Turkey and Austria-Hungary and these were opposed is active war by Russia, Great Britain, France, Belgium, Servia, Montenegro and Japan. Armies of Germany invaded Belgium and France, while the armies of Russia invaded Germany and Austria-Hungary, and the forces of the latter country crossed the Save River into Servia. These invasions were accompanied by great battles and many contests were at the same time fought on the sea, including principally battles on the North Sea and the Atlantic Ocean.

Italy renounced the agreement, known as the Triple Alliance (Dreibund), with Germany and Austria-Hungary on May 4, and on May 23, 1915, entered the war on the side of the Entente Allies. In the same year, under date of Oct. 13, 1915, Bulgaria joined the Central Powers and declared war against the Entente Allies. The entrance of Bulgaria into the war opened the direct route of travel between Germany and Asia Minor, and by a union of forces the countries of Servia and Montenegro were over-run and parts of Albania and Greece came into possession of the Central Powers.

Rumania joined the Entente Allies August 27, 1916, when that country declared war against Austria-Hungary. An army of Rumanians promptly invaded Translyvania, one of the states of Austria-Hungary; this army was not

only defeated, but before the end of the year two-thirds of Rumania was overrun and large stores of supplies were captured by the Central Powers.

Portugal also became a party to the conflict in 1916, when Germany, on March 8, declared war because Portugal had seized thirty-six ships belonging to the Central Powers. While the people of Greece were divided in sentiment, the country became involved in the war and most of it was occupied by the Entente Allies.

The United States had protested against the sinking of ships and the infringement on shipping rights early in the war, both against Austria-Hungary and Germany, but principally against Germany, because of the submarine warfare waged by that country upon American and neutral shipping. Finally, on April 6, 1917, the House of Representatives passed the Senate resolution (voted April 4), declaring a state of war exists with Germany, and on the same day the resolution was signed by President Wilson. At the same time active preparation for war was commenced and large additions were voted for the army and navy. Other countries followed the lead of the United States in declaring war against Germany, including Brazil, Cuba, Costa Rico, Guatemala, Nicaragua and Panama.

Declarations of War.

1914.

July 28—Austria vs. Serbia.
Aug. 1—Germany vs. Russia.
Aug. 3—Germany vs. France.
Aug. 3—Germany vs. Belgium.
Aug. 5—Great Britain vs. Germany.
Aug. 5—Austria-Hungary vs. Russia.
Aug. 8—Montenegro vs. Austria.
Aug. 9—Austria vs. Montenegro.
Aug. 9—Serbia vs. Germany.
Aug. 11—France vs. Austria-Hungary.
Aug. 11—Montenegro vs. Germany.
Aug. 12—Great Britain vs. Austria.
Aug. 23—Japan vs. Germany.
Aug. 25—Austria vs. Japan.
Aug. 29—Austria vs. Belgium.
Nov. 2—Russia vs. Turkey.
Nov. 5—Great Britain vs. Turkey.
Nov. 5—France vs. Turkey.

1915.

May 22—Italy vs. Austria.
May 22—Italy vs. Turkey.
June 3—San Marino vs. Austria.
Oct. 14—Serbia vs. Bulgaria.
Oct. 15—Great Britain vs. Bulgaria.
Oct. 16—France vs. Bulgaria.
Oct. 19—Italy vs. Bulgaria.
Oct. 19—Russia vs. Bulgaria.

1916.

Mar. 8—Germany vs. Portugal.
Mar. 10—Portugal vs. Germany.
Mar. 15—Austria vs. Portugal.
Aug. 27—Rumania vs. Austria.
Aug. 28—Austria-Hungary vs. Rumania.
Aug. 28—Bulgaria vs. Rumania.
Aug. 28—Turkey vs. Rumania.
Aug. 28—Germany vs. Rumania.
Aug. 28—Italy vs. Germany.
Nov. 23—Greece vs. Bulgaria.

1917.

Apr. 6—United States vs. Germany.
Apr. 6—Cuba vs. Germany.
Apr. 11—Brazil vs. Germany.
June 21—Hayti vs. Germany.
June 28—Siam vs. Germany.
July 2—Greece vs. Germany.
July 2—Greece vs. Austria.
July 19—Honduras vs. Germany.
Aug. 7—Liberia vs. Germany.
Aug. 14—China vs. Germany.
Dec. 7—United States vs. Austria.
Dec. 10—Panama vs. Germany.

1918.

Apr. 21—Guatemala vs. Germany.
May 7—Nicaragua vs. Germany.
May 24—Costa Rica vs. Germany.

NATIONS INVOLVED: Central Powers, 4; Entente Allies 23.

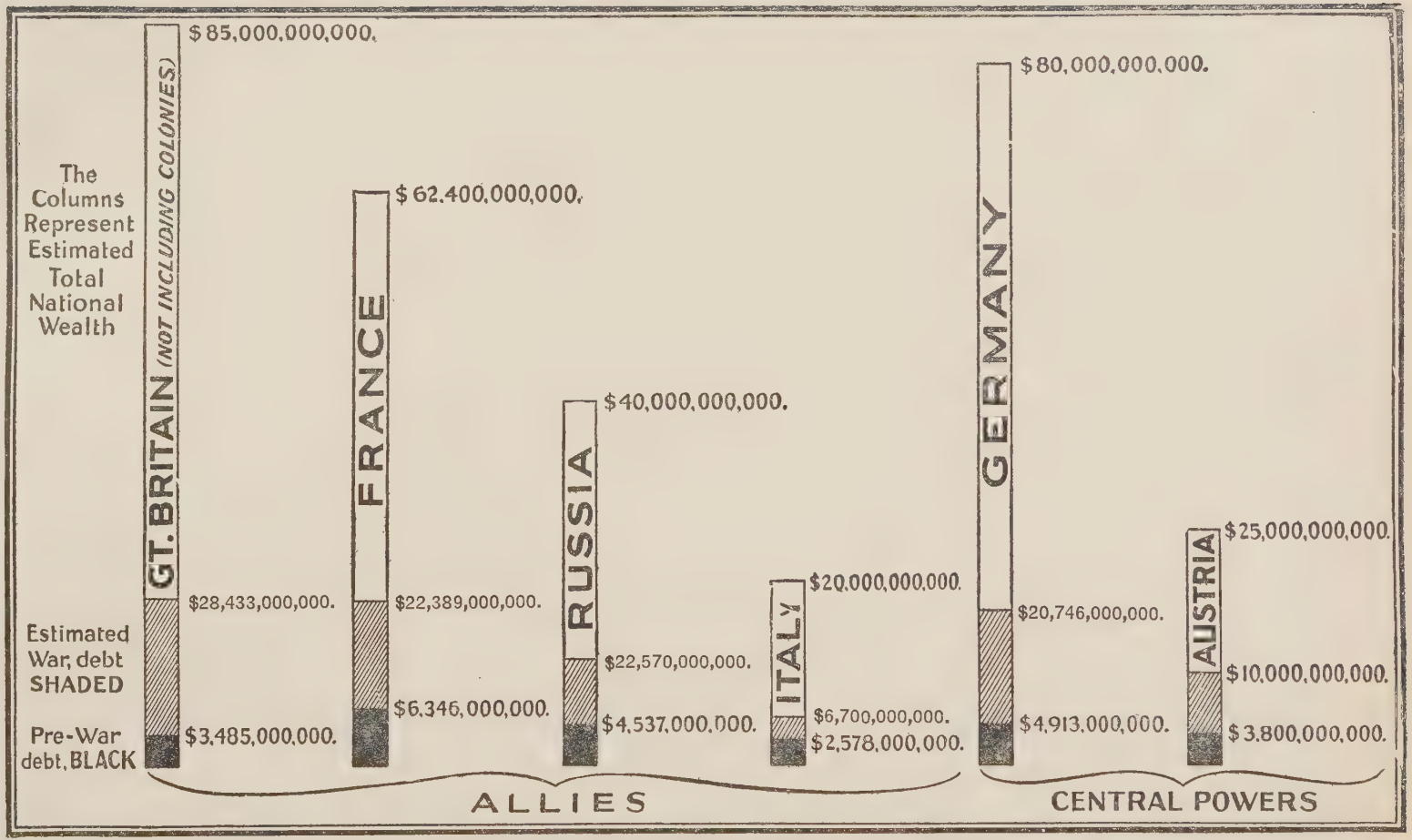


Diagram to show the resources and debts of the chief European nations, based on an analysis made by a group of leading bankers in New York. Corresponding figures for the United States are: Debt before the war, $1,000,000,000; present debt, $20,090,000,000; estimated national wealth, $162,650,000,000.

Outline of the War, 1914-1918.

It is difficult to detail all the minor facts about the great war. In the articles which follow under distinct sub-heads the leading facts are given and these will enable the reader to obtain a reasonably fair idea of the march of events from the beginning of the conflict.

By referring to the tables under the sub-head *Declarations of War* the reader will notice that the first move was made by Austria-Hungary on July 28, when war was declared against Servia. The heir to the throne of Austria-Hungary, Archduke Francis Ferdinand, had been slain by a conspiracy of Servians, hence the anger of the Austrians and Hungarians was aroused to a high pitch, and anti-Servian demonstrations were held in many parts of the dual empire. Hostilities were begun at once and the first shots of the greatest war known in history were fired on the day war was declared.

Russia considered an attack upon Servia by Austria-Hungary as equivalent to war upon the dominion of the czar, hence the Russians began to mobilize and concentrate large armies on the western frontiers. Although Russia denied that this concentration of troops was with hostile intent against Germany, claiming that it was merely a measure for self-protection, the German government assumed that Russia intended to invade Austria-Hungary, which was an ally of Germany. In spite of an ultimatum directed to Russia, threatening that Germany would mobilize and fortify the border, the Russians continued to concentrate large armies in Poland and the west. This caused Germany to declare war and out of this declaration also came a declaration against France and Belgium, while Great Britain declared war against Germany.

The United States, by proclamation of President Wilson, announced strict neutrality, and similar action was taken by the other nations that were not involved in the controversy. Italy, although pledged in the Triple Alliance (Dreibund) to be an ally of Germany and Austria-Hungary, encouraged by the prospect of ultimately taking over some territory from Austria-Hungary, likewise proclaimed neutrality. This in effect was a withdrawal from the Triple Alliance, which Italy interpreted to be for defensive action only, instead of for aggression or conquest.

Campaign in Belgium, 1914.

According to the Gray Book issued by Belgium, Germany demanded passage through that country for the purpose of attacking France, offering to pay damage for permitting her to do so. This King Albert refused and demanded protection, since Germany as well as England and France had by treaty guaranteed Belgian neutrality. However, the forces of Germany marched into Belgium the first week in August and before the end of the month they reached the French border, in the meantime occupying many towns and forts, including Liege, Brussels, Mons, Malines, Charleroi, Louvain, Huy and Namur. The

government of Belgium removed to Antwerp, while the German authorities established themselves at Brussels, where Field Marshal von der Goltz became military governor.

Instead of attacking Antwerp, the Germans sent about 1,000,000 men through Belgium into France. Antwerp later was besieged and captured October 10. The capital of Belgium was now removed to Ostend and later to Havre, France. Besides invading France through Belgium, the Germans sent two armies to make attacks from the east, these including the Army of the Moselle, which marched southwest from Coblenz toward Longwy; and the Army of the Rhine, which advanced from Strassburg westward in the direction of Nancy. The general command of the German armies was placed in the hands of Gen. von Moltke, assisted by Gen. von Falkenhayn, the Prussian minister of war, who succeeded to the chief command when Gen. von Moltke was incapacitated by illness. The opposing armies of Belgium, England and France were commanded, respectively, by King Albert of Belgium, General French of England and General Joffre of France.

Battle of Liege, 1914.

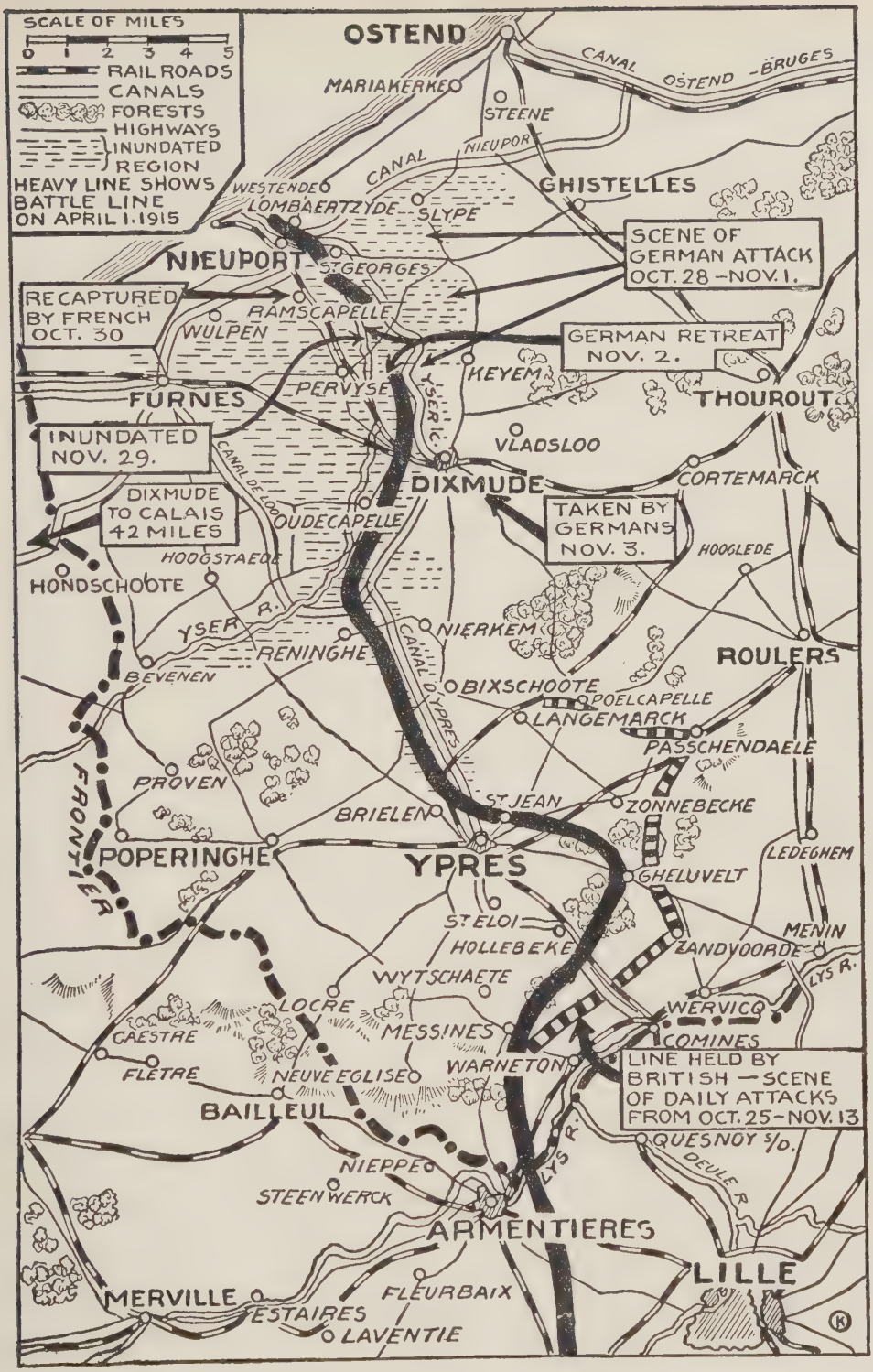
The battle of Liege, Belgium, began Aug. 4, 1914. It was an important factor in delaying the German invasion of France. General Limon, the defender of Liege, with an army of 40,000 men engaged the invaders in Belgium until the British and French could collect their armies. He was opposed by 120,000 Germans, who gradually drove the Belgians back into the city. After two days, one of the forts was silenced, and on Aug. 7, 1914, after resisting four days, General Limon surrendered with his army. Having displayed great courage, he was permitted to retain his sword. The six major and six minor forts, designed in 1886 by General Brialmont, which surrounded Liege, constituted the strongest defenses in Belgium.

Campaign in France, 1914-1917.

The strongest French fortifications were located on the western frontier, hence the invading armies did not advance rapidly. Both sides sustained heavy losses in many battles in the vicinity of Belfort, Verdun, St. Mihiel and in the Argonne Forests. Notable success in Longwy and Maubeuge enabled the Germans to move forward, but in many cases their minor victories were followed by retreats.

In the meantime both France and Great Britain were active and organized for effective resistance. Gen. Joffre was made supreme commander of the armies in France. These armies before the end of the year aggregated about two million men, including 33,000 men sent across the Atlantic from Canada. During the period of preparation these armies were driven by superior numbers from the Belgium frontier back through Lille, Amiens, St. Quentin and the Department of Compiegne. By Sept. 2 the pressure became so great that the government was removed from Paris to Bordeaux, where it remained until December. In the meantime a large French army took the offensive against Alsace-Lorraine, which was invaded and Altkirch and Mühlhausen were captured, but these places were retaken by the Germans and the French armies were driven to the Vosges Mountains, which they held successfully against the enemy.

The campaigns in France, from the early stages after the German retreat from the Marne, were confined largely to the restricted area along the lines of entrenchment. This field consisted of a narrow belt from the North Sea to the frontier of Switzerland, running through the rich agricultural, mining and



MAP TO SHOW THE BATTLE OF YPRES, THE BATTLE OF NIEUPORT, THE INUNDATED DISTRICT OF FLANDERS, AND THE GERMAN DRIVE TOWARD CALAIS AND DUNKIRK.

manufacturing district of northern France. The fortunes of war waged back and forth with spasmodic attacks at irregular intervals; while decisive results were not obtained, the Germans retreated at some points and at others they were driven back, as at Lens, Lamarck and Verdun.

The hostilities on the part of the allies grew more intense in July, 1916, when Sir Lloyd George was appointed secretary of war in England. About six months before Sir John Douglas Haig had succeeded Sir John French as British commander in France. Later, in March, 1917, General Nivelle the French hero of Verdun, succeeded General Joffre, and before the end of the year was himself succeeded as general commander of the allies by General Henri Philippe Petain. In the meantime the British took over a larger portion of the western battle line, leaving the Belgians on the sector in Flanders and the French on the section from Switzerland to the vicinity of Soissons.

Battles of the Marne and Aisne, 1914.

The invasion of France progressed almost without interruption until Sept. 1, up to which time the Germans had reached a point within striking distance of Paris, but for reasons not fully disclosed they began a general retreat. It is asserted that this retreat was due to great losses in killed and wounded, which reduced their forces and likewise diminished their supply of food and ammunition, and they retreated to avoid a disaster. Another reason assigned is that the Russians were invading East Prussia and a large number of men were transported to the eastern front with the view of repelling the Russian invasion. This retreat, whether made for these or other reasons, enabled the allies to take the offensive and drive the invaders east and north from Paris with severe losses to the enemy.

The battle of the Marne, so-called from the vicinity of the river of that name, was a series of engagements in which over two million men took part. The Germans withdrew from this field to prepared positions back of the Aisne River, where they entrenched themselves in bomb-proof and almost weather-proof trenches. It was thought that the engagements on the Aisne would prove decisive, but the tide flowed back and forth and neither side gained material advantages.

In the meantime the German line was extended to the coast of Belgium, on the North Sea, the British taking Ypres and the Germans occupying Ostend, whence it ran toward the southeast to the Vosges Mountains and to the boundary of Switzerland. The year closed without decisive results for either side in any part of this long line of battle.

HEAVILY ARMED INFANTRY MOVING IN SOLID PHALANX.

THE DARDENELLES, EXTENDING FROM THE AEGEAN SEA TO THE SEA OF MARMORA

MAP TO SHOW THE SOUTHEASTERN WAR AREA, OF WHICH THE GREAT FORTS OF CRACOW AND PRZEMYSL ARE THE CENTERS.

Campaign in East Prussia, 1914.

The Russians under Grand Duke Nicholas advanced from Warsaw in two main divisions, one proceeding against East Prussia and the other against Galicia, a province of Austria-Hungary. Within the month of August he penetrated into East Prussia as far as Tilsit, Insterburg and Allenstein, where the numerically inferior German forces were defeated. The Russians now threatened to besiege the great fortress of Koenigsberg, but Gen. von Hindenburg, who commanded the German army in the east, received re-enforcements and defeated Grand Duke Nicholas in the battles of Tannenberg and Allenstein, taking about 70,000 prisoners. This caused the Russians to retreat across the border, but they soon after turned back and won several battles, although none was of a decisive character.

The campaigns in East Prussia were as a whole disastrous to the Russians. At first defeated, they finally were trapped in the marshy region of the Masurian Lakes, where thousands were drowned or perished for want of food and shelter. The initiative now passed over to the Germans, who moved rapidly east from the fortified centers of Breslau, Posen and Thorn, into Poland and eastward to Riga, Vilna, Brest Litovsk and the marshes of the Pripet River, ultimately giving them possession of Courland, Grodno, Poland and part of Volhynia.

Campaign in Poland, 1914-1917.

The Russians, moving southeast from Warsaw, crossed into Galicia and occupied Lemberg, the capital. They captured Jaroslaw and besieged Przemysl, and then advanced into Hungary through the passes of the Carpathian Mountains. However, large support from the Germans enabled the Austrians to check the Russian advance and to inflict heavy losses upon the invaders.

The battle line in Russia now extended from the Baltic Sea to Lemberg, in Galicia, a distance of more than three hundred miles. Battles of more or less importance were fought near Grodno, Kovno, Suwalki, Plock, Lodz, Warsaw and many other places. In November the Germans made an advance from the west upon Warsaw, but were driven back with heavy loss. Emperor William and Gen. Mackensen personally aided in a second march against Warsaw, when Lodz and other places were captured, and it became necessary to make a third advance against Warsaw before it could be captured. Much fighting likewise occurred in Galicia and the year closed without decisive results having been reached.

The great fortress of Przemysl surrendered after a siege on Mar. 22, 1915, when the tide of war appeared to be against Austria-Hungary. An army of Russia reached Sztropko, twenty miles inside of Hungary, by April, but want of ammunition caused the tide to turn once more toward the Teutons, and the same month they recaptured Tarnow and early in June reoccupied Przemysl. Although they lost heavily at Krasnik, in Poland, the Germans held the upper hand along the eastern battle front—the succeeding two years, driving the Russians out of Galacia and Bukowina and far into Volhynia and Podolia.

Battle of Soissons, 1915.

The battle of Soissons, France, was begun by the French on Jan. 8, and continued about five days. It was commenced by heavy bombardment of the approaches to a plateau north of the Aisne river, where both sides fought tenaciously. Gen. von Kluck, the German commander, by a counterstroke drove the French from their trenches and across the Aisne. Heavy losses of men and cannon were sustained by both sides.

Battle of Neuve Chapelle, 1915.

The battle of Neuve Chapelle lasted three days, beginning Mar. 10. An offensive was launched by the British and they captured about a mile of trenches near the line from Lille to La Bassee. Although the British advanced about a mile beyond their original position, the victory was costly, as the British loss aggregated over 12,000 men. It is estimated that the ammunition used in three days at this battle was more than was used in the entire Boer War, which lasted two years and nine months.

Battles of Ypres, 1915-1917.

The Germans took the offensive on April 23, 1915, and drove the combined forces of British and French about five miles. At Steenstraate and Het Sas they crossed Ypres Canal and took many prisoners. In this battle the Germans first used asphyxiating gases on a large scale and by this means attained local success. While the exact losses are not known, it is certain that many Canadians lost their lives in this engagement.

This engagement is more correctly known as the second battle of Ypres, the first, but somewhat less important, occurring in November, 1914, when the Germans drove a deep wedge into the British lines westward to the villages of Messines and Wytschaete. The third battle of Ypres took place in June, 1917, when the British undertook to straighten the Ypres salient by driving the Germans out of both Messines and Wytschaete, which they succeeded in doing and also in taking 7,500 prisoners. The Germans now occupied a more difficult plain, being inclosed on the west by the British front, on the north by the Ypres-Comines Canal, and on the south by the Lys River.

Battle at Champagne, 1915.

The battle at Champagne is the most noted contest in 1915. In this battle the French and British took the offensive on Sept. 18; after the conflict had raged a week the Germans lost trenches on a front of five miles. The allies advanced from one and a half to two miles and captured Souchez and other villages. Both sides lost many men and prisoners, although the advantage may be said to have rested with the allies. Many Canadians took part in this field of action and won much praise for the heroism displayed while attacking under fire.

Firing Standing Firing Kneeling Firing Prone

THREE IMPORTANT POSITIONS WHILE FIRING.

Battle at Falkland Islands, 1915.

The naval engagement off the Falkland Islands in the south Atlantic occurred Dec. 8, 1914, between naval forces of Great Britain and Germany. Vice-Admiral Sir F. C. Doveton, commander of a British squadron, went to search for the German squadron which had sunk the cruisers *Monmouth* and *Good Hope* in the Pacific on Nov. 1. After diligent search, on Dec. 8, the German forces were seen coming from the Straits of Magellan, approaching Fort Stanley, a fortified point on the east side of the East Falkland Islands. In this engagement the British had the advantage, the Germans losing the *Scharnshorst,* the *Gneisenau,* the *Leipzig,* and the *Nurnburg* and a number of minor ships, including the *Baden* and the *Santa Isabel.* Severe losses were also inflicted upon the British, but they outnumbered the enemy and consequently gained the advantage.

Battle off Helgoland, 1915.

A naval battle between the British under Vice-Admiral Beatty and German raiding forces occurred about 140 miles northwest of Helgoland on Jan. 24, 1915. The German report stated that one British battle cruiser and two British destroyers were sunk. On the other hand, the British reported that the German cruiser *Bluecher* and several minor ships were destroyed.

Uprising in South Africa, 1914-1915.

Early in Oct. 1914, an uprising occurred in South Africa against the British. The insurrection was under the leadership of Lieut.-Col. Solomon G. Maritz, who had fought against the British in the Boer War. His trained force numbered about five hundred men, equipped with modern guns. General Botha was sent against the rebels, who had gathered a force of more than ten thousand active followers, but they were attacked and defeated. Notable engagement took place at Rustenberg, Doornberg, Zandfontein, Dewetsdorp and numerous other places. By March, 1915, the uprising was suppressed and Col. Maritz was finally captured at Angola, West Africa, Aug. 11.

Dardanelles Campaign, 1914-1916.

One of the objects of the war as announced by Russia was the annexation of that portion of Turkey which includes Constantinople and the Dardanelles. Accordingly, the British and French made an attack on the Aegean Sea while Russia co-operated with her fleet in the Black Sea. A number of forts at the Aegean Sea entrance to the Dardanelles were reduced and military forces were landed at Kum Kale, Sidd-el-Bahr and other points of the Gallipoli Peninsula. In an attempt to force the Dardanelles the British lost the battleships *Irresistible* and the *Ocean* and the French lost the battleship *Bouvet,* including many men. In May, 1915, the British battleships *Goliah, Triumph* and *Majestic* were sunk.

The campaign to capture the Dardanelles and Constantinople ended in disappointment, the attacking forces evacuating the Gallipoli Peninsula on Jan. 9, 1916. The entire enterprise not only proved a failure, but it left the Turks in control of their capitol. Besides losing many thousands of men, the Entente Allies lost six of their best warships.

Death of Francis Joseph, 1916.

The death of Emperor Francis Joseph occurred in the Castle of Schoenbrunn, in Vienna, on Nov. 21, 1916. He had reached the age of eighty-six years and had reigned nearly sixty-eight years, furnishing one of the longest periods known in history. He was active mentally until the last.

Charles I., son of Archduke Otto, the younger brother of Archduke Francis Ferdinand, who had been assassinated in Bosnia, now became emperor of the dual empire. In 1911, he married Princess Zita of the Bourbon house of Parma. On entering the throne, he declared that it was his purpose to maintain the union and integrity of Austria-Hungary.

Battle of Jutland, 1916.

The naval engagement known as the battle of Jutland, or the battle of Skager-Rok, occurred on the North Sea, fifty miles west of Jutland, May 31, 1916. This engagement is considered the greatest naval battle of history, though not the most decisive. In it were engaged the principal forces of the British and German navies and both sides claimed the advantage, although heavy losses in men and ships were sustained.

According to the British report, the British fleet consisted of thirty-seven dreadnoughts and eight pre-dreadnought cruisers, while the German fleet consisted of sixteen dreadnoughts, five battle cruisers and six pre-dreadnoughts, each side being supported by destroyers and other smaller vessels. The British admitted a loss of 114,100 tons and 5,613 men, and reported the German loss to consist of 63,015 tons and 3,966 men. From these figures the report of the Germans differs in that they placed the German loss at 60,720 tons and the British at 117,750 tons. The German report placed the German loss at 2,863 men and the British loss at 6,617 men. The ships admitted lost by the British include the *Queen Mary, Indefatigable, Invincible, Defense, Warrior* and *Black Prince,* while the Germans lost the ships *Pommern* and *Lutzow.* In this battle the British were commanded by Admiral John Jellicoe and the Germans were commanded by Admiral Rheinhardt Scheer.

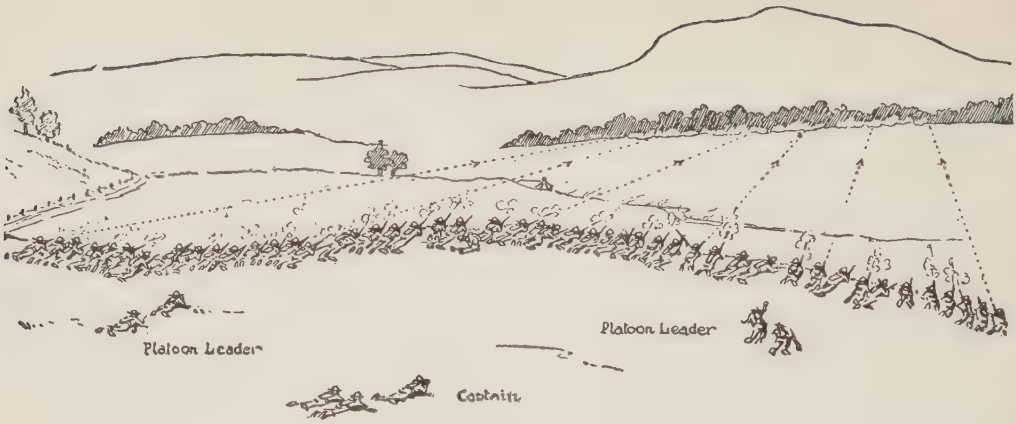
Struggle for Verdun, 1916-1917.

The German troops under Crown Prince Frederick William began an attack upon Verdun Feb. 22, 1916, and the first series of battles in this field ended the following September. In the early part of the struggle the Germans advanced four miles, leaving them still three miles from the strong fortress of Verdun, and later the French swept forward and recaptured Fort Douaumont and most of the terrain which the enemy previously conquered. Although Verdun as a fortress had little or no value, the moral effect of capturing it was considered worth while. Thousands of French and Germans laid down their lives at the points where great engagements took place, such as Fort Vaux, Haucourt, Hill 304, Cumieres, Bethincourt, Caillette Wood and many others. An estimate of the killed and wounded on each side has been placed at 800,000 men.

Verdun continued intermittently to be a place of contest, being directly on the entrenched line from the North Sea to the frontier of Switzerland. Here Crown Prince Frederick William sought to dislodge the French and break their resistance so as to open the way to Paris. The French, under their commanders, had adopted the slogan "They shall not pass," and it was this determination that won the laurels. In this sector the tide turned more favorably to the French in 1917, when, late in the summer, they recaptured several forts on the Meuse, including Beaumont Heights and other fortified places near Verdun.

Battle of the Somme, 1916.

The British and French swept a section along the Somme river by their artillery in June, and in July their combined forces made an almost resistless attack on a front of twenty-five miles. They captured the first line of trenches and many villages, the object being to reach Bapaume and Peronne. The action



THE BATTLEFIELD, SHOWING THE CONTROL AND DIRECTION OF PRONE FIRING BY INFANTRY.

lessened gradually after two weeks, during which time several thousand shells were fired per day. Owing to wet weather, decisive results were not obtained, although considerable territory was captured by the French and British. The losses in killed and wounded were extremely heavy on both sides; the Germans lost about 700,000 men and the British and French lost between 800,000 and 900,000 men.

Rumania Joins the Allies, 1916.

War by Rumania was declared against Austria-Hungary Aug. 27, 1916. Chief among the causes assigned was that Rumania desired to hasten the end of the conflict and to safe-guard her racial interests. Promptly the Rumanian army invaded Transylvania, where it met with temporary success, capturing the cities of Hermannstadt and Kronstadt. Large guns and allied forces of Germans, Austrians, Bulgars and Turks were placed under Gen. von Falkenhayn and Field Marshal von Mackensen and the Rumanians were not only expelled from Transylvania, but driven eastward with great rapidity. Battles were fought at Constanza, Orsova and Craiova, after which Bukharest, the capital, was evacuated and promptly occupied by the Germans, on Dec. 6. Thence a campaign was made toward the north and the Rumanians were driven entirely out of Wallachia and Dobrudscha and across the lower Sereth River. King Ferdinand removed the Rumanian capital to Jassy and his army, strengthened by Russian support, succeeded in keeping possession of the larger part of Moldavia. Great stores of food and war supplies were captured by the Germans in the Rumanian campaign.

Warfare in Rumania continued to remain an outstanding feature of the war throughout 1917. Having driven the Russians out of Bukowina, in conjunction with Bulgars and Turks, the Teutons captured Fokchani, near the Sereth river, and crowded the Russo-Rumanians from the foothills of the wooded Carpathians. The important city of Odessa, on the Black Sea, now became the objective of the invaders, who hoped to make the Bug River, from its source to its entrance into the Black Sea, the line of aggression in the southeast, but in this they met strenuous opposition from the Russo-Rumanians, whose lines had been stiffened under the political leadership of Premier Kerensky.

Revolt in Ireland, 1916.

A large party of Irish citizens, supported by the Sinn Fein Society and other agencies, both in and out of Ireland, attempted to secure independence by

establishing the Irish Republic. The aims of the leaders as set forth in a proclamation issued April 24, sought to unite the Irish people into a nation and to make war for freedom. They declared that Ireland should be unfettered and under control of the Irish people, instead of being a dependence of any other country. Padraic H. Pearse was elected provisional president of the republic, James Connolly was appointed commander of the revolutionary forces and a committee of safety was chosen to manage the government.

The first acts of hostility consisted of seizing the general post office at Dublin and occupying the city hall. British soldiers in uniforms, constables and others were shot down. Many sympathizers of the Irish fired shots upon British soldiers from buildings and other places of concealment. The British military forces succeeded in suppressing the revolt on May 1. About 300 persons lost their lives, and property valued at $15,000,000 was destroyed.

Sir Roger Casement, who had been in the British consular service, was captured as he attempted to land in Ireland, coming across the English Channel from Germany. His ship was accompanied by the submarine U-19, which convoyed a German vessel loaded with arms and supplies. The British transported him to London, where he was confined in the Tower, and after a trial on the charge of high treason was hanged on Aug. 3. Besides Sir Casement, fourteen other leaders in the revolt were executed.

War Policy of Greece.

Greece was divided into two groups from the beginning of the war, one led by King Constantine and the other by Eleutherios Venizelos. The former party sympathized with the Central Powers, while the latter took the side of the Entente Allies. Venizelos left Athens and established a provisional government on the island of Crete, which was formally recognized by the allies in October, 1916, and that faction declared war against Germany. Several regiments were raised to fight near Saloniki against the Bulgars and Germans. The activity of the Venizelists would not have been effective had they not been supported by France, England and Italy, which countries acted in unison in compelling the king to surrender the navy, arms and ammunition to the Entente Allies.

Before the end of 1916 a blockade of all the ports in Greece was declared, which caused open hostilities with the royalists. In the meantime active fighting by the Entente Allies was taking place in Macedonia, where neither side made much headway, although the Germans were compelled to give up Monastir and several other important points. A climax in the affairs of Greece was reached June 12, 1917, when King Constantine was removed from the throne. His second son, Alexander, was selected, as king of Greece by the Entente Allies, the revolutionary government of Russia opposing his election. Greece now became more actively engaged in the war on the side of the Entente Allies.

Revolution in Russia.

Russia became restless early in 1917, owing to the fact that the ruling party favored a separate peace with Germany. This was opposed by the revolutionary parties, which, in addition to favoring a continuance of the war, also favored the overthrow of the monarchy and the establishment of the republic. Active hostilities began March 11, and four days later the czar was compelled to abdicate in favor of his brother, Michael Alexandrovitch. However, the latter was not recognized by the new government, which chose Georges E. Lvoff as president of the council. The following day Michael Alexandrovitch renounced the throne of Russia and the republic became established.

A long pause in hostilities followed the collapse of the monarchy, partly because Germany was still hoping for a separate peace with Russia, and partly because the new government wanted time to re-organize the fighting forces of the nation. This condition of inactivity continued until the latter part of June, when Gen. Kerensky was made dictator of all the Russias and took personal command of the offensive in Galicia. This movement proved only a temporary success, although many thousands of prisoners and much territory were gained by the Russians. The march into Galicia enabled the Russian armies under Gen. Korniloff to capture Halicz and other important points in the vicinity of Lemberg. However, thousands of Russian soldiers revolted against the order to take part in further hostilities, whereupon 20,000 deserters were executed for treason. In spite of these drastic measures the Russian armies began a rapid retreat and lost practically all the points of advantage gained in the campaign of several years in Galicia and Bukowina, including Taropol, Stanislau, Kolomea, Czernowich and Kimpolung.

The Italian Front.

Italy declared war against Austria-Hungary May 22, 1915, and promptly occupied the boundary running in two great curves from Switzerland to the Adriatic Sea. In the early part of the war an effort was made to drive north from the vicinity of Verona through Trient, along both sides of the Adige River, in Tyrol, but little headway was made and the project of advancing was abandoned. This shifted the principal efforts to the Carnic Alps and the Julian Alps, where the Italians crossed the Isonzo river and later, on Aug. 9, 1916, captured the important city of Gorizia.

The principal aim of the Italians the first two years of the war was to capture Trieste, which, owing to the rocky and greatly elevated mountain barriers proved impossible. The fortunes of war in this field waged back and forth without material advantage to either side, although at numerous points the casualty lists were very great on both sides. The possession of the two sections of which Trient and Trieste are the centers was the chief object of Italy, which country sought to have them added to the domain of the nation.

The Italians under General Cadorna fought an enduring campaign throughout the summer of 1917 on the Isonzo River, which they crossed above Gorizia, in the vicinity of Monte Santo. In doing this they hoped to penetrate into Carniola, a state of Austro-Hungary, and then drive east and south beyond Trieste. The purpose was to encircle and besiege that city, which they expected to attack both from land and by naval forces on the Adriatic Sea. However, the Austro-Hungarians threw heavy reënforcements into this field and held the invaders back with serious losses in killed and wounded, but themselves losing large numbers of men, both by hostilities and imprisonment.

Independence of Poland.

Soon after the beginning of the war, as early as Aug. 15, 1914, a manifesto was issued by Russia in which Poland was promised home rule. The promise included the provisions that the Polish people should remain united with Russia and that they were to have an autonomous government with freedom in religion and language. No part of these promises could be carried out for the reason that the entire country which formerly constituted Poland was occupied by the German and Austria-Hungary armies.

On November 5, 1916, a joint manifesto was published at Warsaw by Germany and Austria-Hungary granting autonomy to Poland. This manifesto promised complete freedom to promote internal developments, such as the use of language, the exercise of religion and the establishment of schools and univer-

sities. Steps were taken immediatey to carry out these promises and the Polish schools and universities were opened for general attendance. Archduke Stephen of Austria, a cousin of the late Emperor Francis Joseph, was selected as regent of Poland, with the design of becoming candidate for king or president after the close of the war.

The War in Asia.

An expedition of British troops was sent from India in a campaign up the valleys of the Tigris and Euphrates, the object being to capture Mesopotamia and Bagdad. A pitched battle was fought at Basra, where the Turks were defeated with heavy losses, but the British were compelled to withdraw after meeting reverses in the vicinity of Bagdad and retreated to Kut-el-Amara, a short distance above the Gulf of Persia.

The British were surrounded and besieged at Kut-el-Amara nearly five months, when Major General Charles Townsend was compelled to surrender his

MAP OF THE WAR ZONE IN ASIA, SHOWING THE STRATEGIC RAILWAYS AND CHIEF CITIES OF TURKEY.

force of about 12,000 troops. The British continued to meet reverses in this field until the early part of 1917, when they recaptured Kut-el-Amara and in March also took possession of Bagdad and continued their operations toward the northwest.

Grand Duke Nicholas, having been superseded by Czar Nicholas as commander-in-chief of the Russian armies Sept. 8, 1915, was sent against the Turks from the Caucasus. He made a successful march against Erzerum, which he captured, and subsequently drove the Turks out of Mush and Trebizond, a port on the Black Sea. The Russian advance proved successful in Asia until the Russian revolution, when Grand Duke Nicholas was arrested as a sympathizer of the czar and was imprisoned at Petrograd. Reinforcements were sent to this field from Constantinople and the Turks succeeded in recapturing Mush and other points of advantage in the summer of 1917.

Sinking of the Lusitania, 1915.

The *Lusitania*, a steamship of the Cunard Line, was ruthlessly sunk by a German submarine off the southeastern coast of Ireland, May 7, 1915. This ship was 785 feet long, had a speed of twenty-five knots per hour, and had a capacity of 32,500 tons. On board were 1,906 persons, of which 708 were saved and 1,198 were lost. The persons on board consisted of a crew of 651 and a passenger list of 1,255, and the cargo consisted of general merchandise, including 111,762 pounds of copper, 260,000 pounds of brass, 1,271 cases of ammunition and some other military stores. The cargo was valued at $735,000, the ship was worth $10,000,000, and the insurance was $7,500,000.

British Statement: A jury appointed by British authority held an inquest over several bodies and agreed upon a verdict of which the following is the essential part, and which represents quite clearly the position of the British people:

We find that the deceased met death from prolonged immersion and exhaustion in the sea eight miles south-southwest of Old Head of Kinsale Friday, May 7, 1915, owing to the sinking of the *Lusitania* by torpedoes fired by a German submarine. We find that this appalling crime was committed contrary to international law and the conventions of all civilized nations. We also charge the officers of said submarine and the emperor and government of Germany, under whose orders they acted, with the crime of wholesale murder before the tribunal of the civilized world."

German Statement: The German foreign office defended the sinking of the *Lusitania* on the ground that England was trying to starve the people of Germany, including the women and children, and the following is a part of the official statement:

"In spite of the German offer to stop the submarine war in case the starvation plan was given up, the British merchant vessels are being generally armed with guns and have repeatedly tried to ram submarines, so that a previous search was impossible. They cannot, therefore, be treated as ordinary merchant vessels. A recent declaration made to the British parliament by the parliamentary secretary in answer to a question by Lord Charles Beresford said that at the present practically all British merchant vessels were armed and provided with hand grenades. Besides, it has been openly admitted by the English press that the *Lusitania* on previous voyages repeatedly carried large quantities of war material. On the present voyage the *Lusitania* carried 5,400 cases of ammunition, while the rest of the cargo also consisted chiefly of contraband."

Resignation of Secretary Bryan, 1915.

William Jennings Bryan resigned his office as Secretary of State June 8, 1915, because he objected to a note prepared by President Wilson in regard to sinking the *Lusitania* and to be transmitted to Germany. The following is a part of a statement issued by Mr. Bryan assigning reasons for his resignation:

"Two of the points on which we differ," he said, "are, first, as to the suggestion of investigation by an international commission; second, as to warning Americans against traveling on belligerent vessels or with cargoes of ammunition. I believe that this nation should frankly state to Germany that we are willing to apply in this case the principle which we are bound by treaty to apply to disputes between the United States and thirty countries with which we have made treaties providing for investigation of all disputes of every character and nature.

"These treaties, negotiated under this administration, make war practically impossible between this country and the thirty governments representing nearly three-fourths of all the people of the world. Among the nations with which

we have these treaties are Great Britain, France and Russia. No matter what disputes may arise between us and these treaty nations, we agree that there shall be no declaration and no commencement of hostilities until the matters in dispute have been investigated by an international commission, and a year's time is allowed for investigation and report.

"This plan was offered to all the nations, without any exceptions whatever, and Germany was one of the nations that accepted the principle, being the twelfth, I think, to accept. No treaty was actually entered into with Germany, but I cannot see that that should stand in the way when both nations endorsed the principle. Such an offer, if accepted, would at once relieve the tension and silence all the jingoes who are demanding war.

"The second point of difference is as to the course which should be pursued in regard to Americans traveling on belligerent ships or with cargoes of ammunition. Why should an American citizen be permitted to involve his country in war by traveling upon a belligerent ship when he knows that the ship will pass through a danger zone? The question is not whether an American citizen has a right under international law to travel on a belligerent ship; the question is whether he ought not, out of consideration for his country, if not for his own safety, avoid danger when avoidance is possible.

"President Taft advised Americans to leave Mexico when the insurrection broke out there, and President Wilson has repeated the advice. This advice, in my judgment, was eminently wise, and I think the same course should be followed in regard to warning Americans to keep off vessels subject to attack.

"I think, too, that American passenger ships should be prohibited from carrying ammunition. The lives of passengers ought not to be endangered by cargoes of ammunition whether that danger comes from possible explosion within or from possible attacks from without. Passengers and ammunition should not travel together. The attempt to prevent American citizens from incurring these risks is entirely consistent with the effort that our government is making to prevent attacks from submarines. The use of one remedy does not exclude the use of the other."

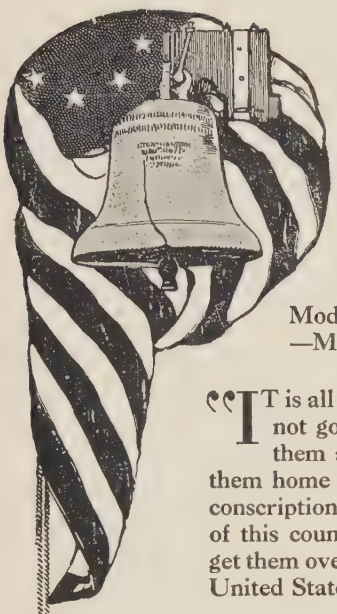
President Wilson immediately accepted the resignation and added the following in the letter of acceptance:

"Our judgments have accorded in practically every matter of official duty and of public policy until now; your support of the work and purposes of the administration has been generous and loyal beyond praise; your eagerness to take advantage of every opportunity for service it offered has been an example to the rest of us; you have earned our affectionate admiration and friendship. Even now we are not separated in the object we seek, but only in the method by which we seek it.

"It is for these reasons my feeling about your retirement from the secretaryship of state goes so much deeper than regret. I sincerely deplore it. Our objects are the same and we ought to pursue them together. I yield to your desire only because I must, and wish to bid you God-speed in the parting. We shall continue to work for the same causes, even when we do not work in the same way."

German Peace Proposal.

Germany and her allies addressed a note to various neutral powers Dec. 12, 1916, in which the history of more than two years of the war was reviewed. The note was presented to the United States, Spain and Switzerland and these nations were asked to transmit it to Great Britain, France, Russia and Italy. While no basis for terminating the war was outlined in the note, the German



The Three M's of WAR

Modern warfare is spelled with three M's —Men, Money and Materials.

"IT is all right to ask for volunteers, but if we are not going to be able to feed them and clothe them and equip them, we might as well send them home today. There is no use in passing the conscription bill to get 500,000 young men to go out of this country if you cannot feed them after you get them over to France."—Louis B. Franklin, of the United States Treasury Department.

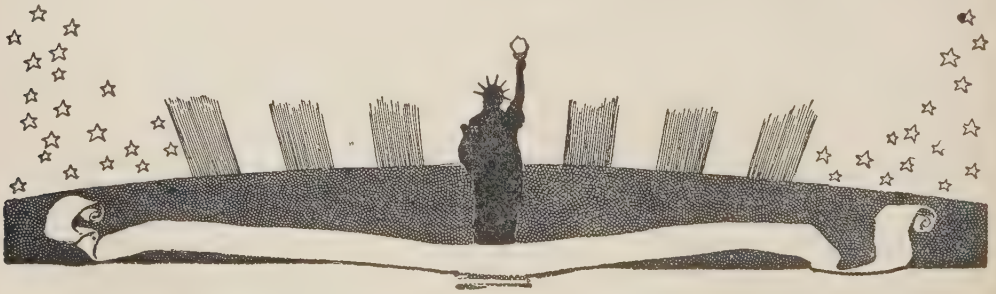
FRANK SCOTT, chairman of the Munitions Board Council of National Defense, in talking to the Editorial Conference of the Associated Trade Press in Washington, May 25, subdivided "Materials" into "Metal and Machinery" and spelled war with four M's. Illustrating the great wastage of metal, he said:

AT Gettysburg, the greatest battle ever fought on this hemisphere, in three days' fighting, an army of 84,000 men in the federal army used 310 cannon, and the report of their chief of artillery shows that they fired away 32,726 rounds of ammunition in three days. Now, the same number of guns today could fire that ammunition easily in about 7 min. When Sherman marched from Atlanta to the sea, he took with his army of approximately 50,000 men sixty guns and 200 rounds of ammunition per gun, and a French 75- or an English 18-pounder or an American 3-in. gun could fire those 200 rounds very easily in 10 min. They were to last Sherman's guns from October until January.

EVERYTHING except food and clothing has been multiplied to about that extent. The definition used to be made of artillery ammunition that it was equivalent of income, something to be spent and replenished, and cannon were the equivalent of capital; you did not expend it. You occasionally lost some of it when you were unfortunate, but you did not expend it. You took it into the service and brought it back.

TODAY, owing to the tremendous increase in gun fire and the fact that the smaller guns, the new guns, can fire say from twenty to twenty-six shots a minute and that powder is of a very different character from the old black powder, the life of the gun is reduced, so that now artillery or cannon themselves have become a part of income to be expended and replenished.

YOUR guns go to the line to do their share of firing; they must be retired and new guns take their place. These guns are relined, and go to the line to take the place of the guns similarly retired to be relined, and so forth, and that process keeps up from the day your troops take the field."



foreign office sent to Washington for publication in the United States the peace terms which the Central Powers offered as follows:

"For the complete restoration of Belgium.

"For the evacuation by Germany of all territory captured in northern France during the progress of the war.

"For the establishment of Poland and Lithuania as independent kingdoms.

"For the retention of Serbia by Austria-Hungary and the restoration to Bulgaria of all territory lost by that country in the second Balkan war.

"For the restoration to Austria of territory captured by Italy in the neighborhood of the Adriatic sea.

"For the restoration to Germany of all her colonial possessions in Africa, the far east and other parts of the globe.

"For the retention of Constantinople by Turkey."

The Allies Reply to the German Peace Proposal.

On Dec. 30, 1916, the allies united in a reply to the German peace proposal, rejecting the same in terms expressed in the following portion of the note:

"The putting forward by the Imperial Government of a sham proposal lacking all substance and precision would appear to be less an offer of peace than a war manoeuvre. It is founded on calculated misinterpretation of the character of the struggle in the past, the present, and the future. As for the past, the German note takes no account of the facts, dates and figures which establish that the war was desired, provoked, and declared by Germany and Austria-Hungary.

In reality these overtures made by the Central Powers are nothing more than a calculated attempt to influence the future course of war and to end it by imposing a German peace. The object of these overtures is to create dissension in public opinion in the allied countries. But that public opinion has, in spite of all the sacrifices endured by the Allies, already given its answer with admirable firmness, and has denounced the empty pretense of the declaration of the enemy powers. Finally, these overtures attempt to justify in advance in the eyes of the world a new series of crimes—submarine warfare, deportations, forced labor and forced enlistment of the inhabitants against their own countries, and violations of neutrality.

Fully conscious of the gravity of this moment, but equally conscious of its requirements, the Allied governments, closely united to one another and in perfect sympathy with their peoples, refuse to consider a proposal which is empty and insincere. Once again the Allies declare that no peace is possible so long as they have not secured reparation for violated rights and liberties, the recognition of the principle of nationality and of the free existence of small states, so long as they have not brought about a settlement calculated to end once and for all forces which have constituted a perpetual menace to the nations, and to afford the only effective guarantee for the future security of the world. . . ."

President Wilson's Peace Note.

President Wilson issued a peace note Dec. 18, 1916, which he prepared before any knowledge of the German note had been communicated to him. This note suggested lofty purposes in restoring peace to the world and in part is as follows:

"The President suggests that an early occasion be sought to call out from all the nations now at war such an avowal of their respective views as to the terms upon which the war might be concluded, and the arrangements which would be deemed satisfactory as a guaranty against its renewal or the kindling of any similar conflict in the future as would make it possible frankly to compare them. He is indifferent as to the means taken to accomplish this. He would

be happy himself to serve, or even to take the initiative in its accomplishment, in any way that might prove acceptable, but he has no desire to determine the method or the instrumentality. One way will be as acceptable to him as another, if only the great object he has in mind be attained.

Objects To The Belligerents. "He takes the liberty of calling attention to the fact that the objects, which the statesmen of the belligerents on both sides have in mind in this war, are virtually the same, as stated in general terms to their own people and to the world. Each side desires to make the rights and privileges of weak peoples and small states as secured against aggression or denial in the future as the rights and privileges of the great and powerful states now at war. Each wishes itself to be made secure in the future, along with all other nations and peoples, against the recurrence of wars like this and against aggression or selfish interference of any kind. Each would be jealous of the formation of any more rival leagues to preserve an uncertain balance of power amid multiplying suspicions; but each is ready to consider the formation of a league of nations to insure peace and justice throughout the world.

Interests Of The United States. "In the measures to be taken to secure the future peace of the world the people and Government of the United States are as vitally and as directly interested as the governments now at war. Their interest, moreover, in the means to be adopted to relieve the smaller and weaker peoples of the world of the peril of wrong and violence, is as quick and ardent as that of any other people or government. They stand ready, and even eager, to co-operate in the accomplishment of these ends, when the war is over, with every influence and resource at their command. But the war must first be concluded. The terms upon which it is to be concluded they are not at liberty to suggest; but the President does feel that it is his right and his duty to point out their intimate interest in its conclusions, lest it should presently be too late to accomplish the greater things which lie beyond its conclusion, lest the situation of neutral nations, now exceedingly hard to endure, be rendered altogether intolerable, and lest, more than all, an injury be done civilization itself which can never be atoned for or repaired.

"The President therefore feels altogether justified in suggesting an immediate opportunity for a comparison of views as to the terms which must precede those ultimate arrangements for the peace of the world, which all desire and in which the neutral nations as well as those at war are ready to play their full responsible part.

Definite Terms Sought. "The leaders of the several belligerents have, as had been said, stated those objects in general terms. But, stated in general terms, they seem the same on both sides. Never yet have the authoritative spokesmen of either side avowed the precise objects which would, if attained, satisfy them and their people that the war had been fought out. The world has been left to conjecture what definitive results, what actual exchange of guaranties, what political or territorial changes or readjustments, what stage of military success, even, would bring the war to an end.

Peace Aspirations. "It may be said that peace is nearer than we know; that the terms which the belligerents on the one side and on the other would deem it necessary to insist upon are not so irreconcilable as some have feared; that an interchange of views would clear the way at least for conference and make the permanent concord of the nations a hope of the immediate future, a concert of nations immediately practicable.

"The President is not proposing peace; he is not even offering mediation. He is merely proposing that soundings be taken in order that we may learn, the neutral nations with the belligerent, how near the haven of peace may be for which all mankind longs with an intense and increasing longing. He believes that the spirit in which he speaks and the objects which he seeks will be under-

stood by all concerned, and he confidently hopes for a response which will bring a new light into the affairs of the world."

The Central Powers Were Ready for Peace.

This peace note was acknowledged by both sides of the armed conflict. Germany accepted the propositions made by President Wilson and the following is quoted as the essence of the reply:

"The President points out that which he has at heart and leaves open the choice of road. To the Imperial Government an immediate exchange of views seems to be the most appropriate road in order to reach the desired result. It begs, therefore, in the sense of the declaration made on December 12th, which offered a hand for peace negotiations, to propose an immediate meeting of delegates of the belligerent states at a neutral place."

The Entente Allies Were Opposed to a Conference.

The allies replied to the note of President Wilson and expressed cordial appreciation of and sympathy with the benevolent motives of the American government, but protested against some portions of it, concluding as follows:

"It goes without saying that if the Allies wish to liberate Europe from the brutal covetousness of Prussian militarism, it never has been their design, as has been alleged, to encompass the extermination of the German peoples and their political disappearance. That which they desire above all is to insure a peace upon the principles of liberty and justice, upon the inviolable fidelity to international obligation with which the Government of the United States has never ceased to be inspired.

"United in the pursuits of this supreme object the Allies are determined, individually and collectively, to act with all their power and to consent to all sacrifices to bring to a victorious close a conflict upon which they are convinced not only their own safety and prosperity depends but also the future of civilization itself."

President Wilson's Second Peace Note.

A second peace message was delivered Jan. 22, 1917, when President Wilson addressed the Senate of the United States and reviewed the replies he had received from the belligerents. In the course of his address he insisted that the United States must have a part in the work when peace is finally concluded, and that the peace terms must be satisfactory to this country. In concluding his address he said:

"In holding out the expectation that the people and the Government of the United States will join the other civilized nations of the world in guaranteeing the permanence of peace upon such terms as I have named, I speak with the greater boldness and confidence because it is clear to every man who can think that there is in this promise no breach in either our traditions or our policy as a nation, but a fulfillment rather of all that we have professed or striven for.

"I am proposing, as it were, that the nations should with one accord adopt the doctrine of President Monroe as the doctrine of the world: That no nation should seek to extend its policy over any other nation or people, but that every people should be left free to determine its own policy, its own way of development, unhindered, unthreatened, unafraid, the little along with the great and powerful.

"I am proposing that all nations henceforth avoid entangling alliances which would draw them into competition of power, catch them in a net of intrigue and

America and the Red Cross

"UNTIL the Russo-Japanese war more soldiers died on battlefields from preventable diseases than from acts of the enemy."

"THE death rate among medical men, nurses and ambulance drivers is greater than in any other branch of the service, not excepting aeronautics."

DR. FRANKLIN H. MARTIN, in charge of Red Cross work, medicine and sanitation, Council of National Defense, at the Editorial Conference of the Associated Business Papers in Washington recently, gave expression to the two quotations above. In his interpretation of the Red Cross and what it means to the soldier on the field, he said:

"SANITATION and scientific medicine came into its kingdom at the time of the Russo-Japanese conflict. If we fail in one iota to keep up that same standard that was developed in the Japanese-Russian war, and that is now being maintained and has been maintained in the German war from the beginning of the conflict, and that is now being maintained on the western and other fronts, you will know where to place the responsibility.

"WE found that the regular army," he continued, after telling of the efforts to organize the medical profession, "as it then existed, the militia, contained a very small proportion of the physicians and sanitarians that would be necessary to run an army of 1,000,000. We, therefore, divided the United States into committees. These committees were asked to select the doctors in their state at the rate of one in ten who would best be fitted to serve in case of conflict. These lists were divided into specialists and from these have been selected men who will care for sanitation and medicine in this conflict. We are now planning for the 2,000,000 men who have been called, including those already in service, planning for ten to a thousand.

"THE need is probably greater for medical men than for any other branch of the service. The reason for that is this: England and France, in this great war, have practically depleted their civilian population of medical men. These medical men have gone to the front, have gone into the hospitals, and the waste among the medical men and nurses and ambulance drivers has been far greater than any other branch of the service, not excepting the air service. The reason for that is this, the medical man, the ambulance man, the stretcher bearer must go to the field, he must work, he must continue to work, no matter what the condition of the battle may be, and without very much regard as to where his position in the battlefield may be. In other words, in one recent retreat, 267 doctors were exploded to atoms in one half hour—more than half the number of doctors in our medical service in the whole United States Army and the National Guard at the beginning of this war. These men were in the rear, were coming up, and the land was mined, and they just accidently came upon this spot and were destroyed almost instantly. As the result of that, 5000 men were lying on the ground for 72 hrs. before they could bring medical men from other parts of divisions."

THE men in the trenches in Europe need American medical men. There is a dearth of physicians and surgeons in Europe. We, as Americans, owe our generous support to the Red Cross. Those who go to the front as doctors, nurses and ambulance drivers face as great danger as the soldiers in the trenches. We, at home, should give our support so that the work of those on the fields ministering to the wounded can be performed efficiently.

selfish rivalry, and disturb their own affairs with influences intruded from without. There is no entangling alliance in a concert of power. When all unite to act in the common interest and are free to live their own lives under a common protection.

"I am proposing government by the consent of the governed; that freedom of the seas which in international conference after conference representatives of the United States have urged with the eloquence of those who are the convinced disciples of liberty; and that moderation of armaments which makes of armies and navies a power for order merely, not an instrument of aggression or of selfish violence.

"These are American principles, American policies. We can stand for no others. And they are also the principles and policies of forward-looking men and women everywhere, of every modern nation, of every enlightened community. They are the principles of mankind and must prevail."

Unrestricted Warfare Declared by Germany in the Zone of Blockade.

The German ambassador at Washington, Count von Bernstorff, on Jan. 31, 1917, presented the Secretary of State with a memorandum from the government at Berlin. In this President Wilson was complimented on his speech before Congress on Jan. 22, 1917, outlining his ideals of world peace. The note deplored the attitude of the enemies of Germany, and stated that they alone were responsible for a further continuance of the war. The note in part is as follows:

"Germany and her allies were ready to enter now into a discussion of peace, and had set down as the basis of existence, honor and free development of their own peoples. Their aims, as has been expressly stated in the note of Dec. 12, 1916, were not directed toward the destruction or annihilation of their enemies, and were, according to their convictions, perfectly compatible with the rights of other nations. : : : :

"The attempt of the four allied (Teutonic) powers to bring about peace has failed owing to the lust of conquest of their enemies, who desire to dictate the conditions of peace. Under the pretense of following the principle of nationality, our enemies have disclosed their real aims in this way, viz.: To dismember and dishonor Germany, Austria-Hungary, Turkey and Bulgaria. To the wish of reconciliation, they propose the will of destruction. They desire to fight to the bitter end. A new situation has thus been created, which forces Germany to new decisions. : : : :

"After attempts to come to an understanding with the Entente powers have been answered by the latter with the announcement of an intensified continuation of the war, the Imperial Government—to serve the welfare of mankind in a high sense and not to wrong its own people—is now compelled to continue the fight for existence, again forced upon it, with the full employment of all the weapons which are at its disposal.

"Sincerely trusting that the people and the government of the United States will understand the motives for this decision and its necessity, the Imperial Government hopes that the United States may view the new situation from the lofty heights of impartiality and assist on their part to prevent further misery and unavoidable sacrifice of human life."

The German note was accompanied by two further memoranda, that announcing an unrestricted use of submarines after February 1 in zones of the high seas encircling the coasts of Germany's enemies, and that detailing the geography of the barred seas, the latter of which included a bulletin of re-

The Loss of One.

To you the day is clear,
Cheerful and bright:
Tears dim my eyes; I cannot see
The light.
You view a thousand graves,
And do not care!
The useless loss of life is hard for me
To bear!

You hear the roar of war
On land and sea:
My ears are dulled, the sound is dead
To me.
You think of thousands slain,
And sigh at none!
My heart is breaking as I sadly think
Of one!

—Bernhart Paul Holst.

stricted concessions to be made for the benefit of neutral shipping. The first of these supplementary documents contained the following declarations:

"The government of the United States will understand the situation forced upon Germany by the Entente Allies' brutal methods of war, and by their determination to destroy the Central Powers, and that the government of the United States will further realize that the now openly disclosed intention of the Entente Allies gives back to Germany the freedom of action which she reserved in her note addressed to the government of the United States on May 4, 1916.

"Under these circumstances, Germany will meet the illegal measures of her enemies by forcibly preventing after Feb. 1, 1917, in a zone around Great Britain, France, Italy and in the Eastern Mediterranean all navigation, that of neutrals included, from and to England and from and to France, etc. All ships met within that zone will be sunk."

This announcement caused deep concern in all the neutral countries, but pleasure was expressed in the capitals of the Entente Allies on the ground that it would bring the United States into action against Germany. As early as April, 1916, after sinking the British steamer *Sussex* in the English Channel, the United States government declared it would "sever diplomatic relations with the German Empire altogether" unless the German government "should now immediately declare and effect an abandonment of its present methods of submarine warfare against passenger and freight vessels." Whereupon, on May 4, 1916, Germany declared its purpose to observe "the general principles of visit and search." To this was added that in fighting for her existence neutrals should not expect her to "restrict the use of an effective weapon" if her enemies are permitted to continue to apply at will methods of warfare violating the rules of international law. In the reply of the American government, on May 8, 1916, President Wilson assumed the complete acceptance of the demand of the United States, however, refusing to consider the idea that the future German submarine policy should have any reference to our attitude toward the enemies of Germany.

The United States Declares War.

The first step toward actual hostilities was taken by the United States on Feb. 3, 1917, when the government severed diplomatic relations with Germany because that country on Jan. 31, 1917, had withdrawn the assurance given on May 4, 1916, that it would confine hostilities to the fighting forces of the belligerents and that it would observe "the general principle of visit and search" in the campaigns upon the ocean in general and in the zone of blockade in particular. While this action on the part of the American government was not a declaration of war, it was a step that sooner or later would be followed by such a declaration.

The German government, not willing to consider the United States among its enemies, on Feb. 12, 1917, proposed to discuss the issues between the two countries with the view of reaching some friendly conclusion without engaging the naval and military forces. This the United States refused to do unless Germany would first withdraw from the proclamation of Jan. 31, 1917, in which the imperial government had announced its policy of unrestricted submarine warfare. This precaution was taken because about 200 Americans had already lost their lives through German and Austrian submarine operations. However, the Germans answered by sinking vessels at the rate of about 800,000 tons per month, nearly half of which consisted of merchant ships.

Finally, on April 6, 1917, the United States Congress in a joint resolution declared "a state of war exists" with Germany; which, on being signed the same day by President Wilson, was the formal notice that active preparation to begin hostilities would be undertaken at once. At first a call was made for voluntary enlistments to recruit the army up to its war strength of 293,000 men and to

establish new armies, if sufficient enlistments could be procured. This method proved rather tardy, hence a draft conscription bill was passed by Congress, providing that all men between the ages of 21 and 31 years shall be subject to registration and selection for service in the military forces. This bill was signed by President Wilson May 18.

June 5, 1917, was fixed for the date of registration and nearly 10,000,000 men enrolled. The first call for drafting into the military service included 678,000 men and the drawing took place July 20. Following the physical examinations and the consideration of exemptions which were granted, those accepted were transported to military training camps, or cantonments, within the country to be disciplined and prepared for home service or for transportation to the battle fields of Europe. In the meantime Gen. Pershing, who was given general command of the American army, proceeded with his staff to France to study the conditions of war in that zone and to prepare for the arrivals of American men and supplies, such as ammunition and other military stores.

The Ship of State.

Thou, too, sail on, O Ship of State!
Sail on, O Union, strong and great!
Humanity, with all its fears,
With all the hopes of future years,
Is hanging breathless on thy fate!

We know what Master laid thy keel.
What Workman wrought thy ribs of steel,
Who made each mast, and sail, and rope,
What anvils rang, what hammers beat,
In what a forge and what a heat
Were shaped the anchors of thy hope!

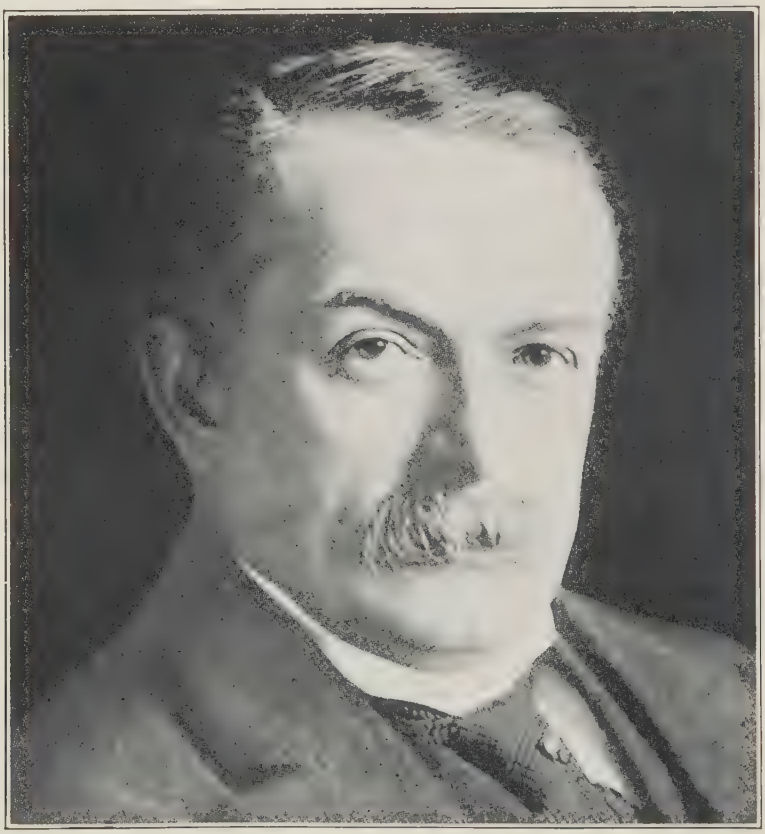
Fear not each sudden sound and shock,
'T is of the wave, and not the rock;
'T is but the flapping of the sail,
And not a rent made by the gale!
In spite of rock and tempest's roar,
In spite of false lights on the shore,
Sail on, nor fear to breast the sea!

Our hearts, our hopes, are all with thee;
Our hearts, our hopes, our prayers, our tears,
Our faith triumphant o'er our fears,
Are all with thee,—are all with thee!

—*Henry Wadsworth Longfellow.*

REAR-ADMIRAL WILLIAM S. SIMS,
Commander of the American Fleet
in European Waters.

MAJOR-GENERAL ARTHUR W. CURRIE,
Commander of the Canadian Forces
in France.



DAVID LLOYD GEORGE,
Premier of Great Britain during the World War.

(Opp. Page 693)

Canada in the War

Canada became a participant in the war, primarily, in response to the ties of kinship which bind her to the mother country, coupled with the desire to support Anglo-Saxon civilization. All who offered themselves to fight within the first three years of the war did so voluntarily, since compulsory service was not then in force.

Having 7,500,000 inhabitants, Canada at the beginning of the war exceeded Rumania in population, and was about as populous as Bulgaria and Servia taken together. But it was not easy to organize her people for war purposes, owing to the great expanse of country over which the inhabitants were scattered. However, close organization was not only accomplished but her soldiers distinguished themselves by great valor when they reached the firing line.

The Stern Resolve to Attain Victory.

Although the participation in the war was prompt from the beginning, alike in furnishing men, money and materials, it was felt that more support should be given in the great conflict. Accordingly, Premier Robert Borden, on January 1, 1916, pledged that the country would raise an army of 500,000 men for foreign service. Within a period of twenty months this pledge had not been redeemed, notwithstanding the efficient work of General Samuel Hughes, the minister of militia and defense. This was due in part to the larger demand for men in the agricultural, mining, transportation and manufacturing industries, all of which had been vastly augmented by the greater need of and higher prices paid for materials at home and abroad.

At the beginning of 1917, a total of 380,000 men were in uniform, leaving a shortage of 120,000 men of the number pledged. Accordingly, the government proposed a selective draft, a system of compulsory military service, which became a law through the signature of the Governor General, the Duke of Devonshire, on Aug. 28, 1917. Subsequently little difficulty was experienced in bringing the quota up to the number pledged, and the country was placed on a strong footing from a military standpoint.

Financing the Dominion.

Canada accomplished much in financing her own war expenditures and in aiding the mother country. Two vast movements were started early in the war, known as the National Service Campaign and the National Thrift Campaign. The former had for its purpose the enlistment of sympathy and support of the nation, and the latter was designed to induce men and women to serve by working, saving and investing money in war securities. Both these movements had a wide and effective influence throughout the country.

By arranging with the Bank of England and the British Treasury, vast purchases of materials were financed in the Dominion. Loans were floated in Canada and in New York; these were supported both by the people and the banks of the country. In this way fully one billion dollars worth of war supplies were obtained, including munitions valued at $600,000,000.

In the second year of the war two domestic loans were floated, both of which were over-subscribed. These two loans, the first for $50,000,000 and the second for $100,000,000, netted $280,000,000, being over-subscribed $180,000,000 without depleting the deposits in savings banks. Within the third year of the war, owing to the larger returns from the steadily growing volume of trade in war materials, similar subscriptions amounting approximately to $300,000,000 were obtained.

The National Thrift Campaign not only augmented the subscriptions to war funds, but had a wide influence upon the productive industries, especially in gardening and farming. The people saved, practiced domestic economy, and at the same time planted, cultivated and harvested the crops so much needed to support life at home and abroad. In 1916, owing to more or less extensive draughts, the western grain production was only 500,000,000 bushels as against 750,000,000 produced the previous year. Although dry weather more recently affected the production locally, greater attention turned to gardening, orcharding and the animal industry, all of which tended to supply much needed foodstuffs.

Actively on the Firing Line.

It is notable that the Canadian soldiers, under the inspiration of their commander-in-chief, Sir Arthur Currie, distinguished themselves in many battles for their skill and bravery. Special mention may be made of their part in the Battle of Champagne, in September, 1915, where they demonstrated great ability in driving the enemy from powerful and intensely fortified trench positions and breaking through entrenched lines under tremendous resistence. Other instances are found in the bravery of the Canadians at Lens, in August, 1917, where they captured many trenches and great supplies of coal and provisions, and the sector which included Hill 70 and extended to the vicinity of Inverness Copse, near Ypres.

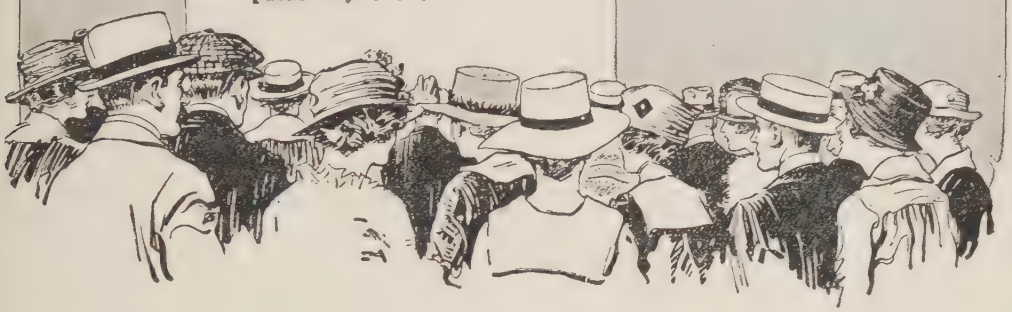
Military critics have emphasized especially the brave and enduring defensive and offensive action of the Canadians at Ypres, where the Germans for the first time employed poison gases. The Canadian contingents likewise covered themselves with laurels for bravery at Vimy Ridge, where they fought with great bravery along with the British, especially in 1918, at the time of the great simultaneous German drive.

At the end of the war the expeditionary forces of Canada aggregated 500,000 men. The total casualties during the war numbered 307,676, of which 58,876 were killed and 248,800 were injured. The entire cost of the war for the Canadian people was about $1,000,000,000. Following is a list of the glorious honors won by Canadians:

Victoria Cross	30	Meritorious Service Medal	119
Military Cross	1467	Distinguished Service Order	432
Military Medal	6549	First Bar to Military Medal	227
Royal Red Cross	130	Second Bar to Military Medal	6
Bar to Military Cross	61	Distinguished Conduct Medal	939
Mentioned in Dispatches	2573	Bar to Distinguished Service Order	18

President Wilson's Proclamation

"Let every man and every woman assume the duty of careful, provident use and expenditure as a public duty . . ."



Shortly after war was declared by the United States against Germany, on April 6, 1917, President Wilson issued the following address to the American people:

My Fellow Countrymen:

The entrance of our beloved country into the grim and terrible war for democracy and human rights which has shaken the world creates so many problems of national life and action which call for immediate consideration and settlement that I hope you will permit me to address to you a few words of earnest counsel and appeal with regard to them.

We are rapidly putting our navy upon an effective war footing and are about to create and equip a great army, but these are the simplest parts of the great task to which we have addressed ourselves. There is not a single selfish element, so far as I can see, in the cause we are fighting for. We are fighting for what we believe and wish to be the rights of mankind and for the future peace and security of the world. To do this great thing worthily and successfully we must devote ourselves to the service without regard to profit or material advantage and with an energy and intelligence that will rise to the level of the enterprise itself. We must realize to the full how great the task is and how many things, how many kinds and elements of capacity and service and self-sacrifice it involves.

These, then, are the things we must do and do well, besides fighting—the things without which mere fighting would be fruitless.

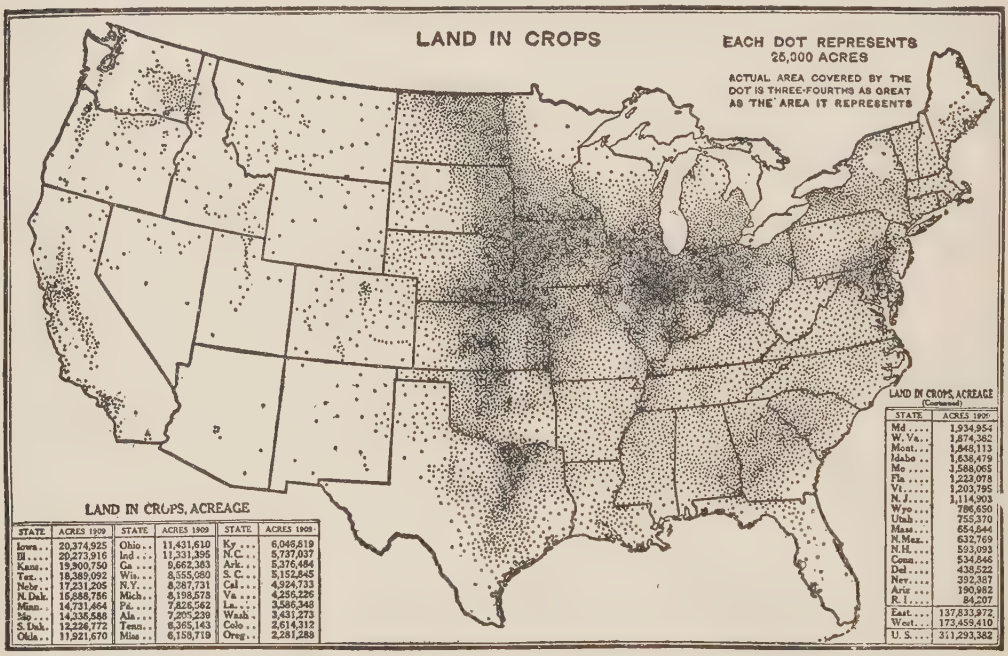
We must supply abundant food for ourselves and for our armies and our seamen not only; but also, for a large part of the nations with whom we have now made common cause, in whose support and by whose sides we shall be fighting.

We must supply ships by the hundreds out of our ship-yards to carry to the other side of the sea, submarines or no submarines, what will every day be needed there and abundant materials out of our fields and our mines and our factories with which not only to clothe and equip our own forces on land and sea, but also to clothe and support our people for whom the gallant fellows under arms can no longer work; to help clothe and equip the armies with which we are co-operating in Europe and to keep the looms and manufactories there in raw materials; coal to keep the fires going in ships at sea and in the furnaces of hundreds of factories across the sea; steel out of which to make arms and

ammunition both here and there; rails for worn-out railways back of the fighting fronts; locomotives and rolling stock to take the place of those every day going to pieces; mules, horses, cattle for labor and for military service; everything with which the people of England and France and Italy and Russia have usually supplied themselves but cannot now afford the men, the materials or the machinery to make.

It is evident to every thinking man that our industries, on the farm, in the shipyards, in the mines, in the factories, must be made more prolific and more efficient than ever, and that they must be more economically managed and better adapted to the particular requirements of our task than they have been; and what I want to say is that the men and the women who devote their thought and their energy to these things will be serving the country and conducting the fight for peace and freedom just as truly and just as effectively as the men on the battle-field or in the trenches.

The industrial forces of the country, men and women alike, will be a great national, a great international service army—a notable and honored host engaged in the service of the nation and the world, the efficient friends and saviors of free man everywhere. Thousands, nay, hundreds of thousands of men otherwise


LAND IN CROPS
EACH DOT REPRESENTS 25,000 ACRES
ACTUAL AREA COVERED BY THE DOT IS THREE-FOURTHS AS GREAT AS THE AREA IT REPRESENTS
LAND IN CROPS, ACREAGE
LAND IN CROPS, ACREAGE (Continued)

STATE	ACRES 1909	STATE	ACRES 1909	STATE	ACRES 1909
Iowa	20,374,925	Ohio	11,431,610	Ky	6,046,619
Ill	20,273,916	Ind	11,331,395	N.C.	5,737,037
Kans.	19,900,750	Ga	9,662,383	Ark.	5,376,484
Tex.	18,389,092	Wis.	8,555,080	S.C.	5,152,845
Nebr.	17,231,205	N.Y.	8,287,731	Cal.	4,924,733
N.Dak.	16,888,756	Mich.	8,198,578	Va.	4,256,226
Minn.	14,731,464	Pa.	7,828,562	La.	3,586,348
Mo.	14,338,588	Ala.	7,205,239	Wash.	3,431,273
S.Dak.	12,226,772	Tenn.	6,365,143	Colo.	2,614,312
Okla.	11,921,670	Miss.	6,158,719	Oreg.	2,281,288

STATE	ACRES 1909
Md.	1,934,954
W.Va.	1,874,382
Mont.	1,868,113
Idaho	1,638,479
Mo.	1,588,065
Fla.	1,223,078
Vt.	1,203,795
N.J.	1,114,903
Wyo.	786,650
Utah	755,370
Mass.	654,644
N.Mex.	632,769
N.H.	593,093
Conn.	534,546
Del.	438,522
Nev.	392,387
Ariz.	190,982
R.I.	84,207
East	137,833,972
West	173,459,410
U.S.	311,293,382

CROP AREAS OF THE UNITED STATES, SHOWING WHENCE THE PEOPLE ARE CLOTHED AND FED.

liable to military service, will of right and of necessity, be excused from that service and assigned to the fundamental sustaining work of the fields and factories and mines, and they will be as much part of the great patriotic forces of the nation as the men under fire.

I take the liberty, therefore, of addressing this word to the farmers of the country and to all who work on the farms. The supreme need of our own nation and of the nations with which we are co-operating is an abundance of supplies, and especially of foodstuffs.

The importance of an adequate food supply, especially for the present year, is superlative. Without abundant food, alike for the armies and the peoples now at war, the whole great enterprise upon which we have embarked will break down and fail. The world's food reserves are low. Not only during the present emergency but for some time after peace shall have come both our own people and a large proportion of the people of Europe must rely upon the harvests in America.

Upon the farmers of this country, therefore, in large measure rests the fate of the war and the fate of the nations. May the nation not count upon them to omit no step that will increase the production of their land or that will bring about the most effectual co-operation in the sale and distribution of their products?

The time is short. It is of the most imperative importance that everything possible be done and done immediately to make sure of large harvests. I call upon young men and old alike, and upon the able-bodied boys of the land to accept and act upon this duty—to turn in hosts to the farms and make certain that no pains and labor is lacking in this great matter.

I particularly appeal to the farmers of the South to plant abundant foodstuffs as well as cotton. They can show their patriotism in no better or more convincing way than by resisting the great temptation of the present price of cotton and helping, helping upon a great scale, to feed the nation and the peoples everywhere who are fighting for their liberties and for our own. The variety of their crops will be the visible measure of their comprehension of their national duty.

The Government of the United States and the governments of the several States stand ready to co-operate. They will do everything possible to assist farmers in securing an adequate supply of seed, an adequate force of laborers when they are most needed at harvest time, and the means of expediting shipments of fertilizers and farm machinery, as well as of the crops themselves when harvested.

The course of trade shall be as unhampered as it is possible to make it, and there shall be no unwarranted manipulation of the nation's food supply by those who handle it on its way to the consumer. This is our opportunity to demonstrate the efficiency of a great democracy, and we shall not fall short of it.

This let me say to the middlemen of every sort, whether they are handling our foodstuffs or our raw materials of manufacture or the products of our mills and factories. The eyes of the country will be especially upon you. This is your opportunity for signal service, efficient and disinterested. The country expects you, as it expects all others, to forego unusual profits, to organize and expedite shipments of supplies of every kind, but especially of food, with an eye to the service you are rendering and in the spirit of those who enlist in the ranks, for their people, not for themselves. I shall confidently expect you to deserve and win the confidence of people of every sort and station.

To the men who run the railways of the country, whether they be managers or operative employees, let me say that the railways are the arteries of the nation's life, and that upon them rests the immense responsibility of seeing to it that these arteries suffer no obstruction of any kind, no inefficiency or slackened power.

To the merchant let me suggest the motto, "Small profits and quick service," and to the shipbuilder the thought that the life of the war depends upon him.

The food and the war supplies must be carried across the seas, no matter how many ships are sent to the bottom. The places of those that go down must be supplied, and supplied at once.

BILLIONS OF BUSHELS

The bushels of food crops produced in the United States in 1918, in 1917 and the average production for five years.

Notice how 1918 falls below the bumper 1917. And if the prophets are right we need to save. Food Economy is a safe policy.

	1918	1917	5 YEAR AVERAGE
CORN	2,583,000,000	2,994,000,000	2,732,000,000
WHEAT	640,000,000	1,026,000,000	728,000,000
OATS	1,251,000,000	1,549,000,000	1,157,000,000
BARLEY	181,000,000	228,000,000	186,000,000
RYE	47,000,000	54,000,000	37,000,000
BUCKWHEAT	12,000,000	15,000,000	17,000,000
RICE	42,000,000	29,000,00	24,000,000
POTATOES	285,000,000	359,000,000	360,000,000
SWEET POTATOES	71,000,000	75,000,000	57,000,000

To the miner let me say that he stands where the farmer does; the work of the world waits on him. If he slackens or fails, armies and statesmen are helpless. He also is enlisted in the great service army.

The manufacturer does not need to be told, I hope, that the nation looks to him to speed and perfect every process; and I want only to remind his employees that their service is absolutely indispensable and is counted on by every man who loves the country and its liberties.

Let me suggest also that everyone who creates or cultivates a garden helps, and helps greatly, to solve the problem of the feeding of the nations, and that every housewife who practices strict economy puts herself in the ranks of those who serve the nation.

This is the time for America to correct her unpardonable fault of wastefulness and extravagance.

Let every man and every woman assume the duty of careful, provident use and expenditure as a public duty, as a dictate of patriotism which no one can now expect ever to be excused or forgiven for ignoring.

In the hope that this statement of the needs of the nation and of the world in this hour of supreme crisis may stimulate those to whom it comes and remind all who need reminder of the solemn duties of a time such as the world has never seen before, *I beg that all editors and publishers everywhere will give as prominent publication and as wide circulation as possible to this appeal. I venture to suggest, also, to all advertising agencies that they would perhaps render a very substantial and timely service to the country if they would give it widespread repetition, and I hope that clergymen will not think the theme of it an unworthy or inappropriate subject of comment and homily from their pulpits.*

The supreme test of the nation has come. We must all speak, act and serve together.

WOODROW WILSON.

Peace Proposed by Benedict XV.

On August 1, 1917, immediately following three years of war, Benedict XV, pope of the Roman Catholic Church, issued a peace message to the nations at war. This proposal is addressed to "The leaders of the belligerent peoples;" in the introduction the question was asked, "Is this civilized world to be nothing more than a field of death?" The text of the message includes the following suggestions:

Arbitration Instead of Arms.

"First of all, the fundamental points must be that the material force of arms be substituted by the moral force of right, from which shall arise a fair agreement by all for the simultaneous and reciprocal diminution of armament according to the rules and guarantees to be established, in a measure necessary and sufficient for the maintenance of public order in each state.

"Then in the substitution for armies, the institution of arbitration with its high pacifying function, according to rules to be laid down and penalties to be imposed on a state which would refuse either to submit a national question to arbitration or to accept its decision.

"Once the supremacy of right has thus been established, all obstacles to the means of communication of the peoples would disappear by assuring, by rules to be fixed later, the true liberty and community of the seas, which would contribute to the numerous causes of conflict and would also open to all new sources of prosperity and progress.

"As to the damages to be repaired and as to the war expenses, we see no other means of solving the question than by submitting as a general principle the complete and reciprocal condonation, which would be justified moreover by the immense benefit to be derived from disarmament, so much so that no one will understand the continuation of a similar carnage solely for reasons of an econmic order.

Restore All Conquered Lands.

"If for certain cases there exist particular reasons they would be deliberated upon with justice and equity, but these pacific agreements with the immense advantages to be derived from them are not possible without a reciprocal restitution of the territory at present occupied.

"Consequently, on the part of Germany the complete evacuation of Belgium with the guarantee of her full political, military and economic independence, the evacuation of French territory; on the part of other belligerent parties, similar restitution of the German colonies.

"As regards the territorial questions, as for example, those which have arisen between Italy and Austria, and between Germany and France, there is reason to hope that in consideration of the immense advantages of a durable peace with disarmament, the parties in conflict would wish to examine them with a conciliatory disposition, taking into consideration, as we have said formerly, the aspirations of the peoples and the special interests and the general welfare of the great human society.

"The same spirit of equity and justice ought to be followed in the examination of other territorial and political questions, notably those relative to Armenia and the Balkan States and territories, making a part of the ancient kingdom of Poland, whose noble and historical traditions and sufferings which it has endured, especially during the present war, ought to conciliate the sympathies of nations.

"Such are the principal bases whereon we believe the future reorganization of the peoples ought to be built. They are of a nature to render impossible the return of similar conflicts and to prepare a solution of the economic questions so important for the future and for the material well-being of all belligerent states.

"Therefore, in presenting to you, who direct at this hour the destinies of the belligerent nations, we are eager to see them accepted and to see thus the conclusion at an early date of the terrible struggle, which more and more appears a useless massacre.

"The whole world recognizes that the honor of the armies of both sides is safe. Incline your ears, therefore, to our prayer. Accept the fraternal invitation which we send you in the name of the Divine Redeemer, the Prince of Peace. Reflect on your very grave responsibility before God and before man.

"On your decision depends the repose and the joy of innumerable families, the lives of thousands of young people; in a word, the happiness of a people for whom it is your absolute duty to obtain their welfare."

The peace proposal of Benedict XV. aroused tremendous sentiment throughout the world. This was due partly to the neutral ground taken by the vatican in the struggle of the nations, but chiefly to the high position of this official of the church. Besides, all the neutral nations as well as the belligerent countries had sustained great losses in men and property and the prices of necessary commodities, such as food, clothing and war materials, had advanced steadily until they reached record figures. Moreover, words of peace had an enticing influence, a powerful effect upon the war-tired world, and all nations were ready to consider the peace proposals set forth, even if the war should continue still longer.

GENERAL JOHN J. PERSHING,

Appointed in 1917 to Command the First American Military Forces Ordered to France.

(Opp. Page 700)

The Answer of the Warring Nations.

The answer of the warring nations to the peace proposal of the vatican in general favored an armistice, a cessation of hostilities at least until a peace conference could be held by the nations involved. From the Central Powers, that is from Austria-Hungary, Bulgaria, Germany and Turkey, came favorable replies supporting in general the plans proposed for the consideration of terms by which the war could be ended and friendly relations re-establised. On the other hand, the nations constituting the Entente Allies were less inclined to a conference, unless such a meeting could be obtained with the consent of the peoples constituting the nations rather than with the sanction of the governments as then constituted.

The United States was the first to reply to the vatican. The answer submitted by President Wilson, on Aug. 29, 1917, in fact embodied the essence of the replies of all other nations which opposed the Central Powers. President Wilson voiced more or less fully the sentiments of the group of nations known as the Entente Allies. The following is the essential portion of his answer:

Answer of the United States.

"Every heart that has not been blinded and hardened by this terrible war must be touched by the moving appeal of His Holiness the Pope, must feel the dignity and force of the humane and generous motives which prompted it, and must fervently wish that we might take the path of peace he so persuasively points out.

"The purposes of the United States in this war are known to the whole world—to every people to whom the truth has been permitted to come. They do not need to be stated again. *We seek no material advantage of any kind. We believe the intolerable wrongs done in this war by the furious and brutal power of the imperial German government ought to be repaired,* but not at the expense of the sovereignty of any people—rather a vindication of the sovereignty both of those that are weak and of those that are strong. Punitive damages, the dismemberment of empires, the establishment of selfish and exclusive economic leagues we deem inexpedient and in the end worse than futile, no proper basis for a peace of any kind, least of all for an enduring peace. That must be based upon justice and fairness and the common rights of mankind.

We cannot take the word of the present rulers of Germany as a guarantee of anything that is to endure, unless explicitly supported by such conclusive evidence of the will and purpose of the German people themselves as the other peoples of the world would be justified in accepting. Without such guarantees, treaties of settlement, agreements for disarmament, covenants to set up arbitration in place of force, territorial adjustments, reconstitutions of small nations, if made with the German government, no man, no nation, could now depend on. *We must await some new evidence of the purposes of the great peoples of the central powers. God grant it may be given soon and in a way to restore the confidence of all peoples everywhere in the faith of nations and the possibility of a covenanted peace."*

The Many in One.

Lord of the universe, shield us and guide us,
Trusting Thee always through shadow and sun.
Thou hast united us, who shall divide us?
Keep us, oh, keep us, the Many in One!

—*Oliver Wendell Holmes.*

Closing Period of the War

The two outstanding facts of 1917 which tended to hasten the close of the war were the revolution in Russia and the entry of the United States into the struggle. While the former was not a potent aggressive force, it had a wide-reaching influence upon the vast armies of combatants engaged by the Central Powers, tending to neutralize rather than stimulate their morale.

On the other hand, America had departed from its traditional political isolation from Europe, and responded quickly with men, money and material to supply the demands of the countries that had become more or less in need of them through long and hard fighting.

Treaty of Brest-Litovsk.

In the latter part of 1917 Alexander Kerensky lost control of Russia and the affairs of the country were taken over by the radical socialists known as the bolsheviki, under the leadership of Nikolai Lenine and Leon Trotzky. This régime proposed an immediate peace with the Central Powers. Accordingly, an armistice was signed in November and commissioners from Russia, Rumania and Ukrainia met representatives of Germany, Bulgaria, Turkey and Austria-Hungary at Brest-Litovsk, where a peace treaty was concluded March 3, 1918. Under the terms of this treaty Russia and Rumania lost territory and Ukrainia was made a recognized government, while the Central Powers eliminated the eastern front and released large numbers of troops for service elsewhere. Although this treaty was approved by the contracting governments, it was denounced by the Entente Allies, who announced in an authorized public statement that the nations whose fate was still in the balance would continue fighting until right and justice would prevail.

Hostilities in the West.

Having conquered in the east and concluded peace with Russia and Rumania, the German great general staff decided in February, 1918, to make a final effort to vanquish France and England before the United States could transport large armies of fighting men to Europe. March 21st was the date fixed for the gigantic attack in France, when about 200 divisions were ready for action under General von Marwitz, General von Below and General von Hutier. The blow was struck on the line from Arras to Chauny, on a front of 48 miles held by the British under General Byng and General Gough with the view of capturing the Oise Valley and threatening Paris. In the attack against the British they were momentarily successful, causing them to retreat toward Amiens, but the French resisted tenaciously and with re-enforcements began to hold the enemy along the Chauny-Noyon line. Finally the Germans were repulsed and Amiens instead of Paris became the objective of Field Marshal von Hindenburg.

The purpose of the Germans was to separate the British from the French and then crush the latter in a forced attack. Their plan was conducted with good morale and strategy, which rendered the situation critical in Picardy and Flanders, but they reckoned on a superiority of tactics and men that they did not possess. In their objectives they not only failed, but the lines of the allies were firmly established, while the invaders were weakened by well directed attacks from the air and by very heavy losses.

Battles of the Aisne and the Vesle, 1918.

The Germans captured Mount Kemmel on April 20th and crowded forward to Saint Eloi, Dratoutre and Chemin des Dames, capturing the latter from the French and crossing the Aisne. They crossed the Vesle at Fismes the following

day and by the last of the month reached Chateau-Thierry and other points on the Marne, where they were halted by the French. Subsequently they captured minor points, such as Pernant and Choug, but on the 6th of June they were attacked and defeated by American marines at Vilny and the heights southeast of Haute Vesnes. The Americans pursued their advantages by attacking northwest of Chateau-Thierry, where they advanced more than two miles on a six mile front, capturing 300 prisoners.

Battles on the Oise and the Marne.

The Germans were still desiring to anticipate the arrival of large numbers of fighting men from America, of whom about one million had landed in France, and on June 9th began an offensive between Montdidier and the Oise, where they advanced four miles and captured Mery and Saint Maur. However, they were defeated shortly after by the French near Saint Maur and by the Americans and the Australians in the region of Vaux, Belleau, Hamel and on the Avre River.

Disappointed in obtaining the advantages they had hoped for from the gigantic campaign launched on March 21st, the Germans halted temporarily to bring up re-enforcements, and by the middle of July struck the last blow in this section by attacking in the vicinity of Chateau-Thierry and westward on a sixty mile front. They succeeded in crossing the Marne at several points, penetrating eastward to Dormans. A simultaneous movement centered east and west of Rheims, with feints in the direction of Epernay and Châlons, but everywhere the French and American lines held firmly. General Foch had received advance information of the designs of Crown Prince Frederick William and had directed a sanguinary attack against the German right flank at Villers-Cotterets, surprising the invaders and turning the tide on the western front. The Germans thereupon retired to the north bank of the Marne and northward.

Campaigns in the South and the East.

The campaigns of the French and the Italians in the Balkans, commenced in July, 1918, were the first movements to cause a visible break in the Central Powers. Their forces swept eastward from the Adriatic Sea, across Albania. At the same time the Greeks, Servians and French crossed the Vardar and captured Monastir and Strumritza. Being defeated and pursued, the Bulgarians signed an armistice at Salonika on September 29th and King Ferdinand abdicated in favor of his son, King Boris, who also abdicated shortly after.

In the meantime General Allenby moved forward with great rapidity in Palestine, on the entire front from the Jordan to the sea, and captured Jerusalem, Beersheba, Nazareth, Acre and Damascus. Cut off from central Europe by the surrender of Bulgaria and defeated in the east, Turkey surrendered October 30th by signing an armistice at Mudros.

The Austro-Hungarians aided by German forces, undertook an ill-fated drive along the Piave in June, 1918, which resulted in their retreat northward on the entire Italian front. They were pursued by the French, Italians and British troops, aided by Czecho-Slovak deserters from the Austrian army, and were defeated in sanguinary engagements, losing fully 300,000 prisoners and large stores of munitions and other supplies.

Thereupon the Austro-Hungarian command realized that it had become useless to continue the struggle longer and took steps to secure an armistice. On November 3d the invaders displayed a white flag and a delegation headed by General von Weber approached the headquarters of General Diaz. The armistice was signed in the afternoon of that date and thus ended the war with the former great Austro-Hungarian Empire.

Battle of Chateau-Thierry.

The tide of events began to turn rapidly in favor of the allies in July, 1918. Large numbers of fighting men had arrived from overseas, including nearly two million men from America and large contingents from Canada and Australia, giving the Entente Allies considerable preponderance in fighting forces as well as in machinery and munitions of war. The invaders realized that they must act quickly and with great force and precision, or they would be compelled to retreat to the German borders, within shelter of their own fortifications, in which case they would lose the advantages gained by the invasion of France and Belgium.

The Germans now undertook four great offensive movements and compelled the allies to retreat southward, but in all these movements the defending lines remained unbroken. On July 15th they began the last desperate attack, in fact the most violent offensive in this region, moving forward on a sixty-five mile front running from Chateau-Thierry to Massignes. During the first day the invaders succeeded in driving a deep salient into the defending lines, but General Foch brought forward large forces of reserves and made persistent attacks at the side of the salient near Chateau-Thierry. The battle continued almost entirely unbroken until the 18th, when the invaders were defeated and compelled to begin their retreat northward.

In this extensive counter movement nine divisions of American troops were employed in the thickest of the fight and it was due largely to their bravery that the Germans were repulsed and their lines were broken. Many military critics regard this battle the turning point of the entire war. It brought disaster to the German forces and they lost more than 35,000 prisoners and 700 guns. Subsequently they were unable to resume the offensive and their activities were on the defensive until the end of the war. The successes at Chateau-Thierry were soon followed by the capture of Fismes, Chipilly Ridge, Montdidier and Juvigny and the defeat of the invaders in Picardy. For these victories General Foch was promoted to the rank of field marshal.

First American Military Drive.

The American military annals won a red letter day on September 12th under the leadership of General Pershing, when the forces of the United States undertook independently the first really large American operation in France. This was the reduction of the salient at Saint Mihiel, where American officers executed American made plans by employing all-American officers, men, tanks, airplanes, artillery and ammunition. They swept the German positions with gas, high explosives and shrapnel shells and then followed these activities by going over the top with resistless energy. Under these powerful and well-directed attacks the German defenses gave way and within twenty-four hours the Americans had destroyed this salient, captured 16,000 prisoners and 553 guns, secured vast stores of war materials, and released many towns and villages from the invaders. The Americans engaged about 600,000 men, or fifteen divisions, and lost about 7,000 casualties. Americans everywhere, both abroad and at home, were thrilled by the bravery displayed by their countrymen in this movement, an enterprise which succeeded in so short a time at a field of action which had resisted successfully for four years and which had been thought impregnable.

Battle in the Argonne Forest.

Following up the advantage gained by the reduction of the salient at Saint Mihiel, General Pershing moved his army westward and directed a concentrated attack against the Hindenburg line between Verdun and Rheims. He massed his troops before and centered the attack upon the Argonne Forest, which had been highly fortified by the invaders. Here on September 25th the American artillery opened fire and began a battle that continued fully forty-one days and

developed into the greatest military engagement ever undertaken by Americans in any war. Into this contest the German commanders threw the flower of their army, the seasoned and experienced veterans of four years, but their gallantry and bravery proved in vain against the superior numbers of resistless Americans. Within the first three days the Americans advanced seven miles and captured 10,000 prisoners. Their progress was checked at points of advantage but it was never halted, the Germans yielding ground until finally they were driven back to the vicinity of Sedan.

In these activities twenty-one American divisions were employed, about 800,000 men, many of whom were twice engaged on the battle line. Between September 25th and October 6th the Americans captured 25,059 prisoners and 468 guns; the Germans sustained a loss of about 200,000 men. These successes destroyed the German plan of defense and, coupled with this the victories of the allies farther west and in Belgium, hastened the end of the war.

The Final Battles.

While the Americans were fighting in the Argonne Forest, the British and French, with the aid of Canadian and American divisions, launched heavy attacks against the Hindenburg line between Cambrai and Saint Quentin, where great losses were inflicted upon the invaders and they were compelled to retreat along the entire line to defenses they had prepared. Victory followed victory from Dixmude to the Swiss border, including the allied successes at Ostend, Zeebrugge, Bruges, Bellecourt, La Fere, Grandpre and Valenciennes. Verdun was relieved and the entire front from Moselle to Sedan was lost to the invaders. The Germans held Metz but conducted a gigantic retreat on the entire front in Belgium.

The Armistice with Germany.

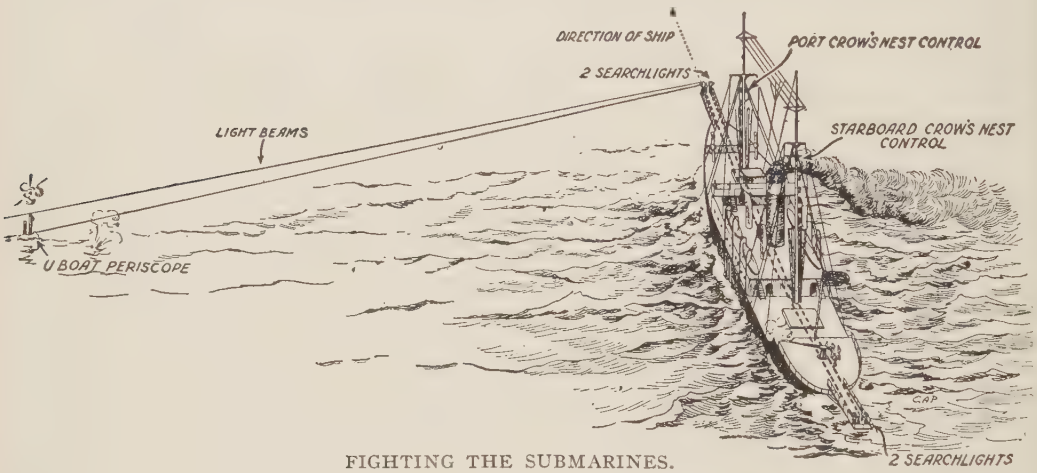
The surrender of Bulgaria, Turkey and Austria-Hungary left Germany alone in the struggle against the largest military organization ever drawn up in battle array. Exposed on the east and southeast, shut out from the ocean and hemmed in by a wall of steel, it had become apparent that further sacrifices were useless and that defeat would follow swift and certain. Bavaria was especially vulnerable, its frontier having been opened for invasion through Austria, and it insisted that peace be contracted by Germany or that its forces be released for defense on its borders. Thereupon Prince Maximilian of Baden became chancellor of Germany and took steps to conclude an armistice and end the struggle.

On November 8th a delegation of ten German representatives headed by Secretary of State Erzberger, by an order of the government and under the approval of the German high command, met General Foch at his headquarters in the field to arrange for the armistice. Here they were received and the full text of the terms as agreed upon at Versailles was read before the delegation by General Foch. This document was then taken over by the delegation, referred to the government at Berlin and finally signed on November 11th, the date on which the war ended. In the meantime, on November 9th, Emperor William abdicated and retired to Holland and Germany became a republic.

New Implements of War

Modern warfare employs many new devices both for offense and defense. These inventions have made it possible for contests to be fought in the air and under the sea as well as on the surface. They enable the contending parties to transport troops rapidly, to observe the enemy easily and to carry on offensive action at long distances.

SUBMARINES. The war under the sea developed into a remarkable agency of destruction by the building of submarines. Submarines move either on the



FIGHTING THE SUBMARINES.

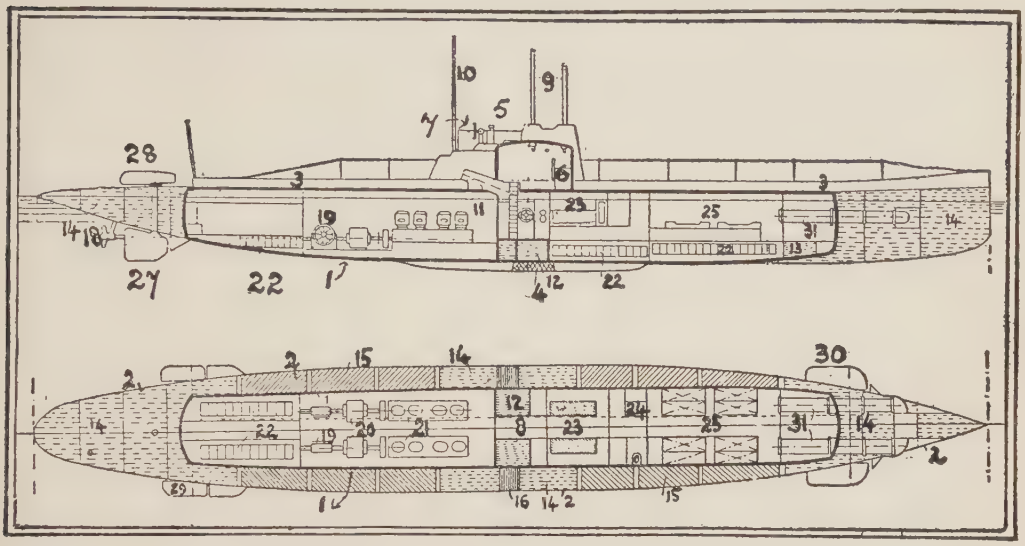
Powerful searchlights trained on the periscope of the U-Boat prevent the commander from taking the bearings of the ship which is attacked. These searchlights are used in this way in daylight to best advantage.

surface or under the sea. They range in size from 500 tons to 8000 tons. The larger vessels carry six-inch guns, which they use when the vessels are not submerged, and they are capable of carrying supplies sufficient to enable them to cross the Atlantic and sail back to their base without taking on fuel, food, etc. Merchant submarines, such as the *Deutschland,* which crossed the Atlantic four times in 1916 and 1917, are used in the time of war to carry freight; they submerge when in a zone of danger. These machines have been improved so as to possess greater speed as well as larger defensive power, hence they make it possible to sink large cruisers and battleships even close to the home base.

The torpedo was used as early as a hundred years ago, but at that time was a mere cask filled with powder, which exploded by contact with a percussion cap as it drifted against the vessel. At present the torpedo shot from a submarine can penetrate the hull of an enemy's ship at a distance of a mile, and the explosion is either by concussion or by a time mechanism at the second designated.

Germany began an unrestricted campaign with submarines Feb. 1, 1917, in a prescribed zone adjacent to her European enemies, and at the same time

announced that the purpose was to sink an average of 1,000,000 tons of shipping per month. This large figure, including the loss of men and cargoes which would follow, if this ambition were realized, would make the submarines a powerful weapon and through it Germany would starve England into terms of peace. It was the purpose of the British to starve Germany in an effectual land



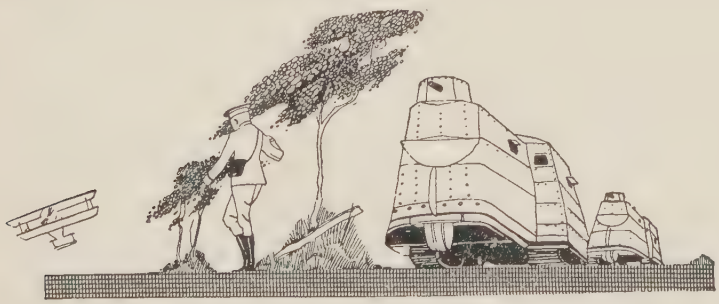
PLAN OF THE NEWEST TYPE OF SUBMARINES.

(1) Inner hull. (2) Outer hull. (3) Deck. (4) Detachable safety keel. (5) Conning tower. (6) Conning tower steering wheel. (7) Bridge steering wheel. (8) Central driving position. (9) Periscopes. (10) Signal mast. (11) Torpedo hatchway. (12) Inner water-ballast tanks. (13) Torpedo-trimming tanks. (14) Outer water-ballast tanks. (15) Fuel oil tanks. (16) Lubricating oil tanks. (18) Propellers. (19) Reversing gear. (20) Electric motors. (21) Oil engines. (22) Accumulators. (23) Officers' quarters. (25) Sleeping berths. (27, 28) Steering rudders. (29) Stern hydroplanes. (30) Forward hydroplanes. (31) Torpedo tubes.

and sea blockade and the unrestricted submarine warfare was the answer. This policy resulted in sinking from 500,000 to 800,000 tons of shipping per month.

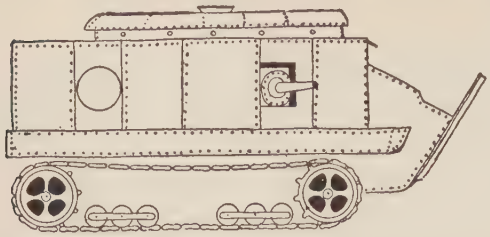
The proposition to destroy the submarine engaged the attention of the most noted scientists, who hoped to make it worthless as a weapon in naval warfare. At the time of this writing the ambition of the greatest inventors along these lines had not been realized. Indeed, the undersea-boat was enlarged in size and the number in use increased rapidly as the war progressed.

Tank and Armoured Motor Cars. Armoured motor cars came into use early in the war. They are hugh machines protected by armour plate, as shown



ARMOURED MOTOR CARS USED IN DIRECT ACTION.

in the illustration, making them formidable against gun fire, and they are used extensively to carry food, ammunition and other supplies needed in a military campaign. In many cases these machines are used by soldiers for patrol duty and by officers for hurried trips. They served a highly useful purpose in Red Cross work, especially on the great battle fields of the eastern and western fronts. Some of these cars are armoured especially to make attacks where the roads are sufficiently improved to operate them. In offense, they are especially effective in breaking down fences and other obstacles and in preparing the attacking army for effective fire with machine guns.



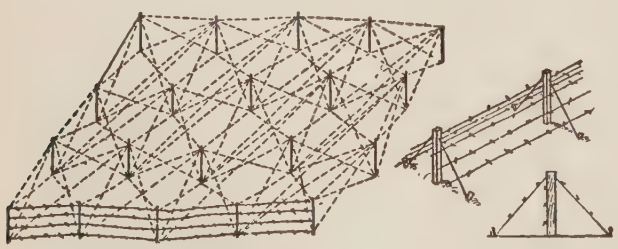
French tank with low caterpillar tracks and high, commodious car. In front is a wire-cutter which throws under the track what it cannot cut.

Steel Darts. Steel darts about five inches long and a little thicker than a lead pencil are used in warfare by aëroplanes, from which they are dropped upon the enemy. Such darts or arrows acquire a terrific velocity when dropped from a height of 1500 feet or more, penetrating the entire body of a man from head to foot. These weapons were first used by the French in attacking large bodies of infantry from the air.

Wireless Apparatus. German inventors first constructed portable wireless outfits for field use. These are carried on automobiles and even motorcycles, and serve to convey messages over distances averaging less than forty miles. When it is desired to communicate at greater distances, especially along extended fronts, heavier outfits are carried with the field equipment. Telephone and telegraph lines are used extensively wherever they can be constructed, even in the trenches, many of which are connected by switchboards with different sections of communication. Communication by these lines extend to the rear, sometimes many miles inland, and enable the staff of officers to remain in close touch with the fighting forces.

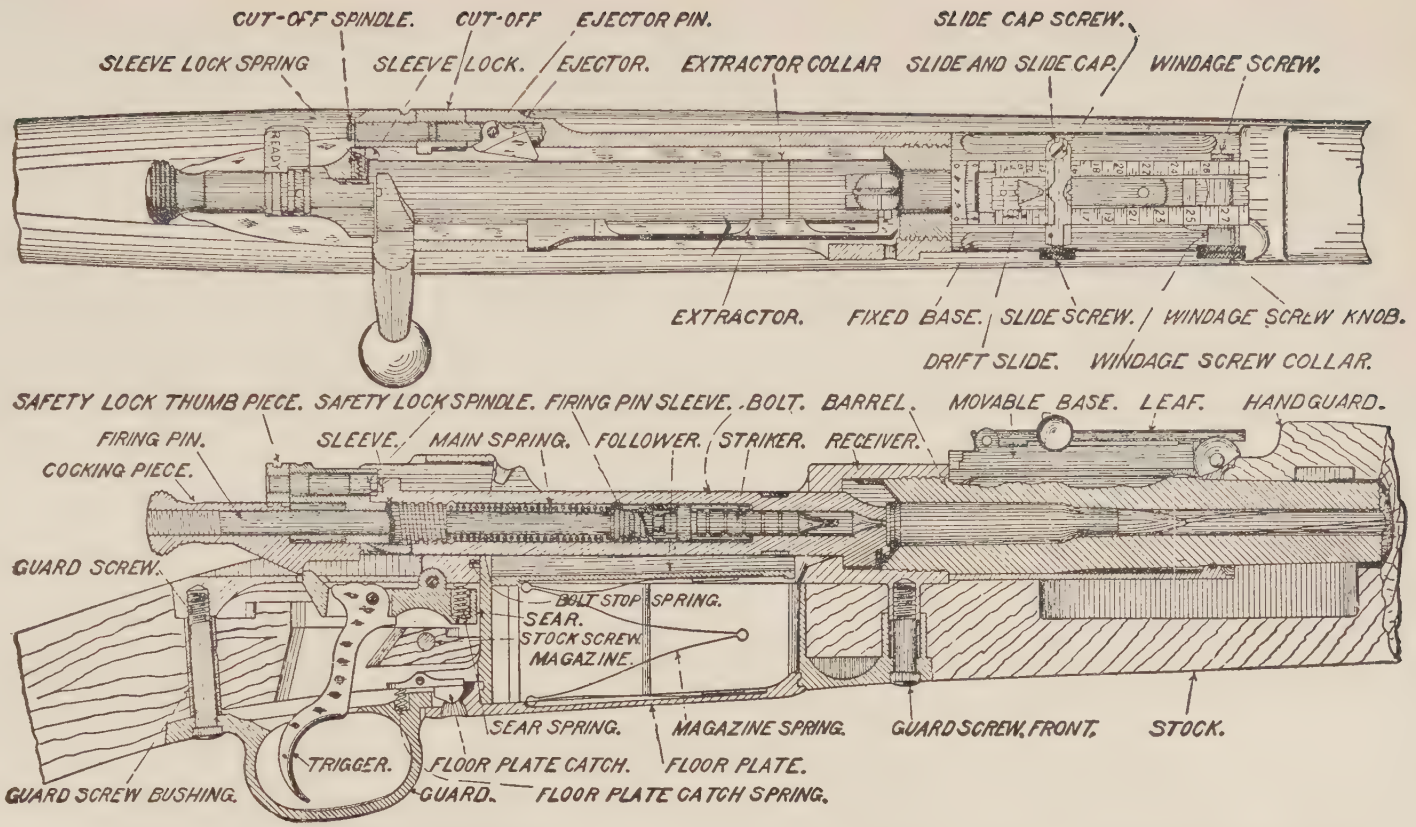
Siege Guns. The war brought forth the largest siege guns ever manufactured, such as the French mortars and the Krupp siege guns, which range up to 16.5 inches. Guns of this class have antiquated the old forts and made it necessary to build on newer and entirely different plans. It has been shown that the trenches dug by the armies are much more effective against these great guns than the largest of the old class of forts.

With these arms may also be classed the anti-aëroplane guns. These are stationed at coastal points, in the vicinity of army camps and elsewhere to furnish protection against the flying machines of different types. The object is to have these guns properly mounted so they may be controlled easily in getting the range of aëroplanes and bomb-throwing air-craft before observations can be taken, or life and property can be destroyed by the machines flying above important forts, armies or cities.



Section of barbed wire entanglements, showing the general plan and the method of anchoring posts.

Trench Warfare: The trench warfare surpasses in effectual offense and defense even the best-planned fortresses in modern times. Wire entanglements constructed with well-anchored posts and strong barbed wire protect the trenches on the side exposed to the enemy, where also are pickets or



Plan to show the United States Springfield Rifle, known also as the Magazine Rifle, 30 Caliber, used in the United States Army.

watchmen equipped with periscopes and electric signal systems, some of which act automatically, and these warn on the approach of the enemy.

The trenches themselves are elaborate networks of ditches, extending hundreds of miles along the more important fronts, and ranging from a few feet to thirty or even forty feet below the surface, depending on the nature of the country to be defended. Some have concrete walls and planked floors, some have elaborate systems of water, heat and light service, and all are provided with kitchens, dining rooms and dormitories. The best of the trenches are bomb-proof and almost weather-proof, and furnish the most convenient method for warfare yet devised.

Military Stores: The military stores are among the best protected institutions of war. No industry connected with war is looked upon with greater concern than the manufacture of ammunition and the newer implements of destruction, such as rifles and cannon. Much has been accomplished by inventors, aided by military experts, both in the guns produced and in the manufacture of shells, rockets, bombs and other implements of destruction serviceable in action.

The military stores include gasses and materials to produce what is known as *liquid fire*. Among the gases are those classed as poisonous, asphyxiating and life-destroying. Some gases are used to destroy the senses, particularly sight and hearing, or to dull or stupefy them, making it impossible for the victims either to fight or escape. In an attack, the gases are blown against the enemy from vast vats by means of pipes. To neutralize or entirely overcome the effective use of these gases, coverings known as *gas helmets* are worn to protect the head and face of the men in action or in the vicinity of the battlefields.

Uniforms: Modern warfare is greatly concerned with the study of coloration, both for effect in the uniforms worn by the soldiers and in the appearance of objects surrounding the forces in action. This was not thought worth while in ancient times, but now, when observations can be made from the air and rifles are capable of killing a man several miles away, it is very necessary to disguise with system.

Mimicry is well known in insects, such as the leaf insect, the walking stick and many species of butterflies, which so nearly resemble the objects that surround them that they are difficult to detect or observe. Even the rabbit and the tiger, the former of great speed and the latter of great strength, are more or less perfectly concealed by their coloring in their native haunts. These circumstances have made the study of cryptic coloring in uniforms a worthy subject of military science.

An individual mine, capable of great destruction.

The uniform commonly worn by the American army is an olive-drab hue called "khaki." It was first employed by the British in the Boer War and is liked because it blends well with the average landscape. In this respect the Germans have been the most painstaking; they have employed the spectroscope and other scientific instruments to discover the combination of tints which will serve most perfectly to blend with the earth and sky. The result of their investigations led them to adopt what they call field-gray (Feldgrau) uniforms and these have since been approximated by many countries.

Mines and Nets: The multiplication of types of submarines, ranging in length from 100 to 600 feet, converted the ocean into a waste-bed of cargoes as well as ships, in spite of submarine chasers and destroyers. As local defense against undersea boats, mines and nets comprise the most effective. However, they can safely be used only at harbors and within well defined areas not far from shore, else they become destructive to legitimate shipping on the high seas.

Nets are employed to entrap or catch undersea craft. They are anchored at shore, or to some firm support, and are suspended into the water from floaters at the surface. In general, mines belong to two classes, those suspended singly or in groups from floaters and those laid in series and connected by copper wires with a station on the coast. The former discharge by a jar, as a sudden contact with a ship, and the latter may explode by a jar or be discharged electrically at will by an operator when the ship of an enemy comes within striking distance.

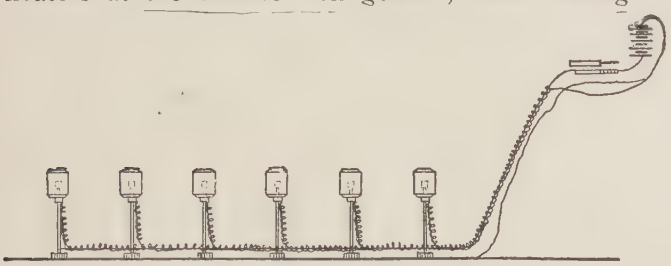


Illustration to show a string of mines in position, connected by wires with an electric station on the coast.

Aërial War: The dreams of flights through the aërial sea, the atmosphere that surrounds our planet, are among the most ancient. In the literature of myths, we read of spirits or angels that drove flying chariots through the heavens. To this class belong the winged horse of Pegasus, and the legend of Hermes, the winged messenger of the gods. The dream of Æschylus is depicted by a writer in these words:

"Oh, might I sit sublime in air
Where watery clouds the freezing snows prepare."

Illustration to show a battle in the air in which nine flying machines are engaged, some having been shot down.

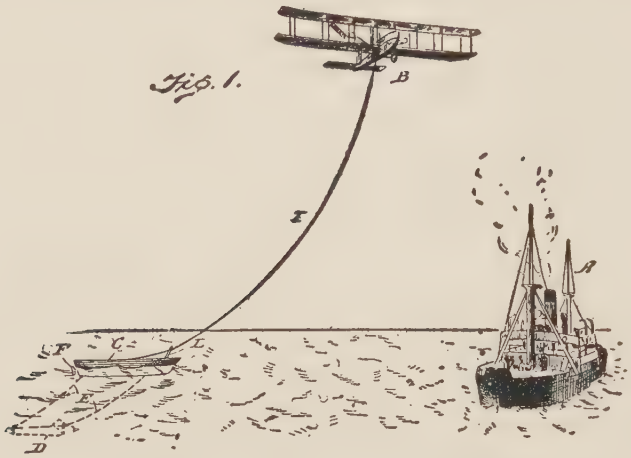
Aërial Equipment of Nations: Aircraft may be considered under the three classes known as observation balloons, dirigible balloons and aëroplanes, although none of these classes is employed for the single purpose which the name may imply. It is rather to be understood that each class serves purposes of observation as well as offense.

Observation balloons ascend by means of gas. They comprise a large group of machines which, true to name, are employed chiefly to study the contour of the country and observe the strength, equipment and probable movement of the enemy.

Dirigible balloons ascend by means of gas, or by a combination of gas and lifting power of machinery, and both their ascending and horizontal movements are machine controlled. The so-called Zeppelin dirigibles are the best known

machines of this class. They include two general types, the *Pre-Zeppelin* and the *Super-Zeppelin.* The former is the older class, and is smaller in size and unprotected. The Super-Zeppelin is armoured against gunfire, has an average speed of 80 miles per hour and carries a searchlight of 40,000 candlepower. Besides carrying rapid-firing guns, capable of discharging not less than 4000 shots per minute, it is equipped with bombs weighing 120 pounds.

Aëroplanes include a great multiplicity of types and sizes of flying craft. They differ from the machines known as "balloons" in that they have one or more planes or carrying surfaces, which somewhat resemble the wings of birds.



AEROPLANE PROTECTING A STEAMSHIP.

A—Steamship; Fig. 1—Aeroplane, showing bomb suspended by the cable B, I, C being paid out, D, E, F, L indicate the mechanism, which, if brought in contact with a submarine, causes a destructive explosion; the aeroplane also carries bombs to be dropped upon the submarine.

Instead of depending upon gases that are "lighter than the air," they rise and float in the air by the working of their own machinery. These machines fight singly or in flocks and are noted for quick action in soaring, circling and signaling. While they differ in capacity, a popular type carries two men, one to pilot and the other to observe and shoot. The newest type is self-righting.

At the beginning of the war France and Germany held first place in aircraft equipment,—France in aëroplanes and Germany in Zeppelins; then Germany had about 600 and France had 1000 flying machines of all kinds. As the war progressed all the countries involved increased the capacity of manufacturing these machines, including the United States, which country appropriated $700,000,000 for that purpose.

Value of Aircraft. The effect of aircraft in war has proven as efficient as the submarine has in naval action. Under cover of night, or when fog and mist obscured the sky, the flying machine sailed over and around the camp of the enemy, noticing the oncoming of reënforcements, the effect of gunfire and the changing position of the front. The observing machine rises out of range of the guns as morning dawns and brightens, or as the clouds rise, when its blue-gray contour scarcely is visible as it is suspended in the air against the overhanging vapors. As it moves about overhead, almost noiseless in its stealthy flight, signals by wireless telegraphy, or by lights, flags or colored powders, are heralded to the commander, who directs his army against the enemy with added precision in the fight.

The aircraft has been especially useful in attacking fortresses, shipyards and military stores. This class of action consists chiefly of dropping bombs on vulnerable points, such as battleships, harbors and military stores. The term "Eye of the sky" has been applied to the flying machines, because the enemy never is safe from being sighted or attacked with severe losses by these birds of the air.

Vocabulary of Aeronautical Terms

Here will be found:

(1) A list of technical terms issued by the Aeronautical Society of Great Britain.

(2) A number of aeronautical terms not included in that list.

(3) A list of French technical terms commonly found in books and articles on aeronautics.

List I.

Aerofoil.—A structure, analogous to the wing or tail of a bird, designed to obtain a reaction from the air approximately at right angles to the direction of its motion.

Airscrew.—Used as a generic term to include both a propeller and a tractor screw. See "Screw."

Aileron.—See "Balancing Flap."

Alighting Carriage.—See "Carriage."

Angle, Dihedral.—In geometry the angle between two planes. The wings of an aeroplane are said to be at a dihedral angle when both right and left wings are upwardly or downwardly inclined to a horizontal transverse line. The angle is measured by the inclination of each wing to the horizontal. If the inclination is upward the angle is said to be positive, if downward, negative.

Angle, Gliding.—The angle between the horizontal and the path along which an aeroplane, in ordinary flying attitude, but not under engine power, descends in still air.

Angle of Incidence or Angle of Attack.—The angle a wing makes with the direction of its motion relative to the air. The angle is usually measured between the chord of the wing and the direction of motion.

Attitude.—An aeroplane's or wing's position relative to the direction of motion through the air.

Back, To.—Of the wind, to change direction counter-sunwise (counter-clockwise).

Balancing Flaps.—Aerofoils used for causing an aeroplane to roll about its longitudinal axis for the purpose of balancing.

Ballonnet.—A word taken from the French meaning "a little balloon" and exclusively limited to an interior bag containing air, within the envelope of an airship.

Bank, To.—To heel for the purpose of turning.

Body.—Of an aeroplane—that part which usually contains the engine, crew, tanks, etc., and to which the wings, carriage, and other organs are attached.

Bracing.—A system of struts and ties to transfer a force from one point to another.

Cabane.—A French word to denote the mast structure projecting above the body to which the top load wires of a monoplane are attached.

Cabre.—Tail-down.

Camber (of a wing section).—The convexity of a wing section. The camber is usually measured (as a fraction of the chord) by the maximum height above the chord.

CANT, TO.—To tilt; to take any inclined position.

CARRIAGE.—That part of the aircraft beneath the body intended for its support on land or water and to absorb the shock of alighting.

CHASSIS.—See "Carriage."

CHORD.—The straight line (taken conventionally fore and aft unless otherwise specified) touching the under surface of an aerofoil at or near the leading and trailing edges. The length of the chord is the projected length of the section on the chord.

CLINOMETER.—See "Inclinometer."

CONTROL LEVER.—On an aeroplane, a lever by means of which the principal controls are worked. It usually controls pitching and rolling.

CROSS SECTION (of an Aerofoil).—The section cut by a fore and aft plane normal to the surface (commonly the under surface).

DIHEDRAL ANGLE.—See under "Angle."

DIVE.—To descend steeply with the nose of the aircraft down.

DOPE, TO.—Of fabrics—to paint a fabric with a fluid substance for the purpose of tightening and protecting it.

DRAG.—The resistance along the line of flight; the head resistance. Compare "Drift."

DRIFT, TO.—To be carried by a current of air or water; to make leeway.

DRIFT.—The distance drifted. The speed of drifting. The word "drift" having a well accepted nautical significance should be avoided as far as possible in the sense of "head resistance" or "drag."

ELEVATOR.—An aerofoil set in a more or less horizontal plane and hinged on an athwartships or transverse line. It is used for controlling the angle of incidence of the aeroplane.

ENTERING EDGE.—See "Leading Edge."

FAIRING.—A piece added to any structure to reduce its head resistance or drag.

FINS.—Subsidary aerofoils set parallel to the normal direction of motion of an aircraft.

FLAPS, BALANCING.—See under "Balancing."

FLAPS, WING.—See under "Balancing."

FUSELAGE.—See under "Body."

GAP.—The distance between the upper and lower wings of a biplane. For specific purposes the points between which it is measured should be indicated.

GLIDE, TO.—To fly, usually on a descending path, when the aircraft is not under engine power.

GLIDING ANGLE.—See under "Angle."

INCIDENCE, ANGLE OF.—See under "Angle."

INCLINOMETER.—An instrument for measuring the angle of slope of an aircraft, referred to the horizontal.

LEADING EDGE.—Of a wing—the forward edge.

LEEWARD.—Away from the wind.

LEEWAY.—Lateral drift to leeward.

LIFT.—The force exerted by the air on an aerofoil in a direction perpendicularly or nearly so to the motion. Usually upwards in ordinary flight.

LONGITUDINALS.—Of an aeroplane, the long fore and aft spars connecting the main with the subsidiary supporting or controlling surfaces.

LONGERON.—See "Longtitudinal."

PANCAKE, TO.—To descend steeply, with the wings at a very large angle of incidence, like a parachute. Contrast "Dive."

PITCH, TO.—To plunge in the fore and aft direction (nose up or nose down). Contrast this with "Roll."

Pitot Tube.—A tube with open end facing the wind, which, combined with a static pressure or section tube, is used in conjunction with a gauge to measure fluid pressure or velocities.

Pressure Head.—A combination of pitot tube and static pressure or suction tube, which, in conjunction with a gauge, is used to measure fluid pressures or velocities.

Pressure Tube, Static.—A tube (usually with holes in its side past which the fluid flows) so designed that the pressure inside it equals the pressure exerted by the fluid on any body at rest in the fluid. Used as part of a pressure head.

Propeller.—An air-screw behind the main supporting surfaces. Compare "Tractor."

Pylon.—A mast or post.

Rib.—Of a wing, a light fore and aft member which carries the fabric for the purpose of giving the desired cross section to the wing.

Rib, Compression.—A rib designed to act as a strut between front and rear spars of a wing.

Roll, To.—To turn about the fore and aft axis.

Rudder Post.—The main post of a rudder.

Rudder.—A subsidiary aerofoil (in an aeroplane more or less perpendicular to the main supporting surfaces) by means of which an aircraft is turned to right or left.

Rudder Bar.—The foot-bar, by means of which the rudder of an aeroplane is worked.

Screw, Air.—An aerofoil so shaped that its rotation about an axis produces a force along that axis for driving an aircraft.

Side Drift.—See "Drift."

Side Slip, To.—In an aircraft, to move more or less broadside on relatively to the air.

Skid.—A part of the alighting gear of an aircraft arranged to slide along the ground.

Span, of Wings.—The distance from wing tip to wing tip.

Span, of Aeroplanes.—The maximum transverse dimension.

Spar.—A long piece of timber or other material. In a wing, either of the beams which run transversely to the aircraft, and transfer the lift from the ribs to the frame and bracing.

Stagger.—Of wings. When the wings of a biplane are set with the upper one slightly ahead of, or abaft of the other, they are said to be staggered. The stagger is measured by the angle made by the line joining the leading edges with the normal to the fore and aft axis of the aeroplane. It is convenient to call the stagger positive if the upper wing is ahead of the lower.

Static Pressure Tube.—See under "Pressure."

Statoscope.—An instrument to detect the existence of a small rate of ascent or descent.

Strainer.—An appliance bearing a suitable mesh for straining impurities from petrol and other fluids. Also compare "turnbuckle."

Streamline.—The path of a small portion of a fluid, supposed continuous, moving relatively to a solid body. The term is commonly used only of such paths as are not eddying, but the distinction should be made clear by the context.

Strut.—A structural member intended to resist compression in the direction of its length.

Tail.—The after part of an aircraft, usually carrying certain controlling organs.

Tie.—A structural member intended to resist tension.

Top Surface Camber.—See under "Camber."
Top Load Wires.—See under "Wires."
Top Warp Wires.—See under "Wires."
Tractor.—An air-screw mounted in front of the main supporting surfaces.
Tractor Machine.—An aeroplane with air-screw mounted in front of the main supporting surfaces.
Trailing Edge, of a Wing.—The after edge.
Turnbuckle.—A form of wire tightener.
Under-Carriage.—See "Carriage."
Under-Surface-Camber.—See "Camber."
Veer, of the Wind.—To change direction sunwise (clockwise).
Velocity of Sideslip.—The speed with which the craft moves broadside on with respect to the air. Distinguish from "drift," q.v.
Warp, To.—Of a wing, to bend so that the outer end of the back spar moves up or down. It is convenient to call the warp positive when the movement is downwards.
Wing Flaps.—See "Balancing Flaps."
Wings.—The main supporting organs of an aeroplane. A monoplane has two wings, a biplane four.
Wires, Lift.—Wires, the principal function of which is to transfer the lift of the wings to the body or other part of the aeroplane structure.
Wires, Warp.—Lift wires connected to the back spar and controlled so as to move its outer end down for the purpose of warping the wing.
Wires, Top Load.—Wires intended mainly to resist forces in the opposite direction to the lift.
Wires, Top Warp.—Top load wires connected to the back spar and passing from wing to wing to allow the wings to warp.
Wires, Drag.—Wires, the principal function of which is to transfer the drag of the wings to the body or other part of the aeroplane structure. Wires intended mainly to resist forces in the opposite direction to the drag are sometimes called "anti-drag wires."
Wires, Drift.—See "Wires, Drag."
Wire-Strainer.—See "Turnbuckle."
Yaw, To.—An aircraft is said to yaw when its fore and aft axis turns to right or left out of the line of flight. The angle between the fore and aft axis of the aircraft and the instantaneous line of flight.

List II.

Other Terms in Common Use.

Aerodrome.—The ground from which flying experiments are made. F. W. Lancaster uses the word in its purely etymological meaning, and he calls a flying-machine an "aerodrome." But custom is against the use of the word in this sense. In like manner we call a place where horses practise a "hippodrome"; we do not call a horse-drawn vehicle a "hippodrome."
Aeroplane.—A flying apparatus with one or more planes or carrying surfaces.
Aerostat.—Balloons of any form, as distinct from heavier-than-air aerial machines.
Airship.—The term is usually confined to dirigible balloons.
Aviation.—Flight, as distinct from ballooning.
Aviator.—The driver of a heavier-than-air flying apparatus.
Ballast.—Any substance taken in a balloon to throw out for the purpose of lightening the load carried. Sand is usually employed as ballast.

Ballon-sonde.—A small balloon sent up with automatically-recording instruments, which, when the balloon bursts at a great altitude, come down attached to parachutes. By this means observations are taken of strata of the atmosphere to which human beings cannot ascend.

Biplane.—A flying apparatus with two main planes or "carrying surfaces" one over the other.

Buoyancy.—The property by which a balloon remains floating in the air. If the balloon has little buoyancy, it descends; if it has more buoyancy, it ascends.

Captive Balloon.—A balloon attached to ground by means of any cable.

Carburetter.—An apparatus by which the air is charged with carbon, or carbon and hydrogen, so that it will burn. That part of the motor in which petrol vapor becomes mixed with air in the proportion necessary for making the explosion.

Cross-tail.—A tail formed by intersecting vertical and horizontal planes.

Curtains.—Vertical planes between horizontal planes, thus forming the structure into a kind of box-kite.

Dirigible Balloon.—A balloon driven by a motor and steered.

Free Balloon.—A balloon that is not held by cables to the ground.

Floater.—Usually a hollow cylinder suspended by a rope from a balloon, and floating in the water for the purpose of keeping the balloon at uniform altitude; and also, by retarding the balloon's motion sufficiently to give it a certain amount of wind-pressure, to enable the aeronaut to put up a sail, and so slightly divert the course of the balloon.

Fusiform.—Spindle-shape.

Glider.—A machine that glides through the air. The term is used to denote an apparatus for gliding without a motor.

Gyroplane.—A flying machine with rotating wings.

Heavier-than-air.—A term applied to all aerial vessels whose ascensional power is not derived from gas.

Helicopter.—A machine with propellers placed horizontally, so that their revolution gives the apparatus an upward motion. The propellers are usually capable of being tilted, in order to give the machine forward as well as upward motion.

Helix.—The trace of a point moving uniformly around a cylinder, at the same time ascending at a uniform rate.

Horizontal Stability.—See "Stability."

Incidence, Angle of.—Often defined as angle of chord to line of thrust.

Inclination.—The inclination of a plane is its angle to the horizontal.

Keel.—A vertical plane or planes arranged longitudinally below or above the body of a flying machine for the purpose of giving stability; also on some dirigible balloons.

Kite-Balloon.—A form of captive balloon, with lifting power derived partly from the buoyancy of its gas and partly from air pressure, as in a kite.

Lifting Power.—A balloon's capacity to lift itself in the air and to carry objects with it.

Lighter-than-air.—A term used to denote all aerial vessels whose ascensional power is derived from the buoyancy of gas or hot air.

Magneto.—That part of the motor which produces the electric sparks which, igniting the petrol vapor, make the explosions in the cylinder.

Motor.—Any engine—steam, electric, or petrol.

Monoplane.—A flying apparatus with one or more pairs of wings or "carrying surfaces" arranged in the same plane.

Montgolfieres.—Balloons whose ascensional power is obtained from hot air.

MULTICELLULAR.—A structure consisting of a row or rows of compartments like box-kites.

NON-RIGID TYPE.—Used of dirigible balloons whose envelopes are not strengthened by any kind of framework; shape maintained solely by internal pressure.

ORNITHOPTER OR ORTHOPTER.—A flapping-wing machine.

PANEL.—Vertical planes dividing biplanes into cells.

PILOT BALLOON.—A small balloon sent up before an ascent, to see in which direction the air currents are moving.

PITCH OF SCREW.—The length of a complete thread measured on the axis. The rise in one complete turn, or the distance through which it could advance in one complete revolution, provided it revolved in an unyielding medium, such as a solid nut.

RADIATOR.—That attachment to the motor which cools the water after leaving the cylinders. In some of the lighter forms of motor the cooling is effected by a rush of air, sometimes provided by a revolving fan.

RIGID (airship).—The gas container being enclosed in a metal or other stiff case, as in the Zeppelin. No interior pressure required.

RIPPING PANEL.—A long seam in the upper part of a balloon, which can readily be torn open by the aeronaut, thus quickly deflating the balloon in descending.

SEMI-RIGID TYPE.—The gas container of fabric resting on a metal or other rigid keel, or containing an interior skeleton, giving a certain amount of rigidity.

SLIP.—The difference between the forward movement of the propellers if they were in a solid (as a bolt screws into a nut) and the actual forward motion of the air craft driven by the propeller.

STABILIZER.—The tail of a flying machine.

STABILITY.—The maintenance of even flight. Absence of rolling and pitching.

Lateral stability is the absence of wobbling or canting from side to side.

Longitudinal stability is the absence of pitching motion forward or backward in the line of flight.

Weathercock stability is the absence of yawing.

SUPERIMPOSED OR SUPERPOSED.—Placed one over the other.

SUSTAINERS.—The main planes in a flying machine. All plane surfaces whose purpose is not for steering, but which provide the lifting power of the machine.

TRAIL-ROPE.—A rope hanging from a balloon and trailing along the ground, assisting the balloon in keeping uniform altitude.

TRIPLANE.—A flying apparatus with three main planes one over the other.

VALVE.—Any part of the balloon constructed for the exit of the gas, except the opening at the neck of the balloon. Valves are operated by the aeronaut, but in some cases are made automatic, yielding to a certain pressure of the gas from within. In dirigible balloons the valves are nearly always automatic.

WIDTH.—The distance from the front edge to the rear edge of a plane.

Cap Powder Bullet

SECTIONAL VIEW OF PERCUSSION SHELL USED IN RIFLES.

Cost of The War

The cost of modern warfare is enormous, especially in the light of comparison with the armed conflicts of former times. This is due partly to the larger number of men engaged, but in particular to the invention of great war machines such as cannon, rapid-firing guns, motor cars, flying machines and naval equipment. These machines and naval equipment are not only expensive in construction, but likewise consume vast quantities of ammunition and take heavy toll in the destruction of property and human life.

This is reasonably well illustrated in the third battle of Ypres, June 7, 1917, where the English had mined under much of the Messines Ridge, which was blown off by the largest amount of powder ever used in a single enterprise. This action was combined with extremely heavy artillery fire, which had been in preparation fully two weeks, and the net result was that the Germans were virtually swept from Messines Ridge, leaving 7,500 prisoners and fifty cannon in the hands of the British.

Losses in Men.

At the end of the period of the war, closing Nov. 11, 1918, the government at Washington published the following statistics to cover the minimum estimate of losses:

Country	Killed	Wounded	Total
Russia	1,500,000	1,584,200	3,084,200
Germany	1,293,200	1,295,000	2,588,200
France	1,270,000	1,540,800	2,810,800
Austria-Hungary	1,423,100	1,446,000	2,869,100
Great Britain	1,205,400	1,210,000	2,415,000
Turkey	327,000	280,000	607,000
Italy	605,000	604,000	1,209,000
Rumania	200,000	400,000	600,000
Servia	60,000	68,000	128,000
Belgium	82,000	150,000	232,000
Bulgaria	7,500	13,000	20,500
Canada	42,919	116,165	159,084
United States	38,693	270,000	308,693

Financing the War.

The cost of the war increased rapidly as the contest was prolonged. At the end of the third year, owing to the higher prices paid for meat, wheat, cotton, steel, copper, chemicals and other necessary materials, the cost of organizing military operations had triplicated. Below is the official estimate for the thirteen leading countries, which probably is somewhat under-stated:

	Total cost for the war	Average daily cost for four years	Average daily cost at end of fourth year
Great Britain	$29,227,000,000	$18,000,000	$24,000,000
Germany	27,205,000,000	16,000,000	21,000,000
Russia	24,547,500,000	13,500,000	14,000,000
France	23,737,800,000	13,000,000	20,000,000
United States	19,950,600,000	23,000,000	25,000,000
Austria-Hungary	19,625,000,000	9,000,000	8,000,000
Italy	7,142,000,000	4,700,000	6,000,000
Bulgaria	1,165,000,000	1,060,000	1,200,000
Turkey	1,114,500,000	1,000,000	1,300,000

Belgium	1,200,750,000	730,000	800,000
Servia	899,700,000	640,000	700,000
Rumania	876,000,000	1,900,000	1,910,000
Japan	301,330,000	551,400	500,000
Montenegro	20,725,000	57,000	20,000

Losses in Shipping.

The total losses in shipping during the first three years of the war are placed at 9,000,000 tons, of which the Entente Allies destroyed 500,000 tons and 8,500,000 tons were lost through German mines and submarines. The unrestricted German submarine warfare adjacent to the coasts of her European enemies, which began Feb. 1, 1917, caused the loss of shipping the first six months, as follows:

February	681,000 tons
March	761,000 tons
April	1,091,000 tons
May	970,000 tons
June	800,000 tons
July	840,000 tons

These figures seem large and the losses at first had a tremendous influence on shipping, but the nations involved turned attention to the purchasing and building of new ships, whereby the actual losses to shipping were greatly minimized. Besides, German ships with a total of 400,000 tons were interned in the harbors of the United states. These included some of the largest vessels in the world, such as the *Vaterland, Amerika, George Washington, Kaiser Wilhelm II., President Lincoln, Kronprinzessen Cecilie,* and many others, the combined value of these interned ships being fully $100,000,000. These vessels were refitted for transports and shipping and were put into military use about Sept. 1, 1917.

Flag of the United States.

EXECUTIVE ORDER.

The executive order of Oct. 29, 1912, is hereby revoked and for it is substituted the following:

Whereas, "An act to establish the flag of the United States," approved on the 4th of April, 1818, reading as follows:

"Section 1. Be it enacted, etc., That from and after the 4th day of July next, the flag of the United States be thirteen horizontal stripes, alternate red and white; that the union be twenty stars, white in a blue field.

"Section 2. And be it further enacted, That on the admission of every new state into the union, one star be added to the union of the flag; and that such addition shall take effect on the 4th of July then next succeeding such admission," fails to establish proportions; and

Whereas, investigation shows some sixty-six different sizes of national flags, and of varying proportions, in use in the executive departments;

It is hereby ordered that national flags and union jacks for all departments of the government, with the exception noted under **(a), shall conform to the** following proportions:

Hoist (width) of flag, 1.
Fly (length) of flag, 1.9.
Hoist (width) of union, 7-13.
Fly (length) of union, .76.
Width of each stripe, 1-13.

(a). Exception: The colors carried by troops and camp colors shall be the sizes prescribed for the military service (army and navy).

Limitation of the number of sizes: With the exception of colors under note (a) the sizes of flags manufactured or purchased for the government departments will be limited to those with the following hoists:

(1), 20 feet; (2), 19 feet (standard); (3), 14.35 feet; (4), 12.19 feet; (5), 10 feet; (6), 8.94 feet; (7), 5.14 feet; (8), 5 feet; (9), 3.52 feet; (10), 2.90 feet; (11), 2.37 feet; (12), 1.31 feet.

Union jacks : The size of the jack shall be the size of the union of the national flag with which it is flown.

Position and size of stars: The position and size of each star for the union of the flag shall be as indicated on a plan which will be furnished to the departments by the navy department. From this plan can be determined the location and size of stars for flags of any dimensions. Extra blue prints of this plan will be furnished upon application to the navy department.

Order effective: All national flags and union jacks now on hand or for which contracts have been awarded shall be continued in use until unserviceable, but all those manufactured or purchased for government use after the date of this order shall conform strictly to the dimensions and proportions herein prescribed.

WOODROW WILSON.

The White House, May 29, 1916.

The national flag of the United States now consists of thirteen alternate red and white stripes, representing the original thirteen states, and a blue field on which are forty-eight white stars arranged in six rows of eight stars each, representing the forty-eight states now constituting the union. The last two stars were added in 1912 when New Mexico and Arizona were officially admitted as states. June 14 is generally observed as flag display day.

Laws are in force in some of the states forbidding the desecration or mutilation of the flag or its use in any way for advertising purposes. A federal law forbids the use of the national flag on trade marks.

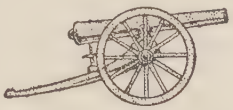
ESTIMATED COST OF THE GREAT WARS OF A CENTURY

SOUTH AFRICAN WAR 1899-1902
$1,250,000,000

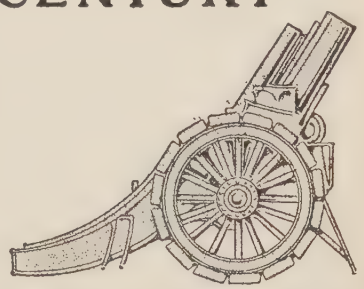
RUSSO-JAPANESE WAR - 1904-05
$2,500,000,000

FRANCO-PRUSSIAN WAR 1870-71
$3,000,000,000

NAPOLEONIC WARS 1793-1815
$6,250,000,000



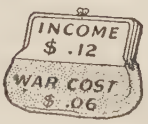
AMERICAN CIVIL WAR 1861-65
$8,000,000,000



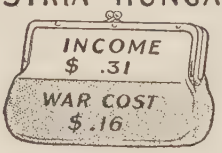
THE LATEST AND MANY HOPE LAST WAR, TO DATE
$200,000,000,000

The average daily income per capita and the average daily war cost per capita, more than half spent on the war. That brings it home.

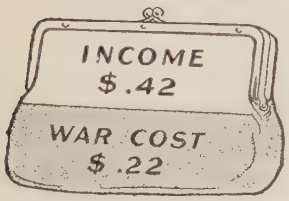
RUSSIA



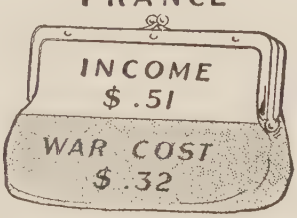
AUSTRIA-HUNGARY



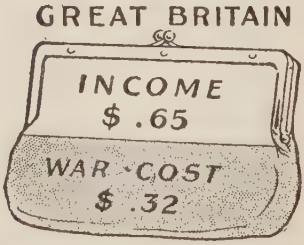
GERMANY



FRANCE



GREAT BRITAIN



Estimated Cost for the United States.

Congress adopted a progressive policy early in the war and appropriated large sums to finance every department of the naval and military forces. The estimates per fiscal year, ending June 30, placed the expenditures as follows:

Shipping Board	$ 1,000,000,000
Current expenses, exclusive of war	1,300,000,000
Total loans to European countries	7,000,000,000
War expenses for the fiscal year	10,000,000,000
Total	$19,300,000,000

These expenditures were provided for by taxes, bonds, tariffs, etc., as follows:

Ordinary and special revenues	$ 4,300,000,000
Domestic bonds	2,000,000,000
Bonds to cover loans to European countries	7,000,000,000
Treasury certificates	4,000,000,000
War savings certificates	2,000,000,000
Revenue to take up outstanding bonds	530,000,000
Total	$19,830,000,000

Leading Events of the Great European War

The nations involved in the conflict known as the Great European War on the side of the Central Powers primarily include Austria-Hungary, Germany and Turkey, and those on the side of the allies at the beginning of the contest include Belgium, France, Great Britain, Japan, Montenegro, Russia and Servia.

CAUSES AND EVENTS. Leading students of state and commercial affairs had long predicted a great war in Europe, owing to the unsettled conditions in the Balkan States and their effect upon the larger nations of the western part of the continent. The Treaty of Berlin, which concluded the war between Turkey and Russia, in 1878, transferred Bosnia with Herzegovina and Novibazar to Austria-Hungary, and this transfer of territory was opposed by Servia and finally led to the assassination of the heir-apparent to the throne of Austria-Hungary, which was the occasion that precipitated the greatest war of history. The nations involved raised war credits of billions of dollars and placed vast armies in the field, and the armed conflict was carried by land and sea to nearly all portions of the earth. The chief causes include the following:

1. Commercial and industrial rivalry, especially as developed between Germany and Great Britain.
2. International jealousy as to power and predominance in the world.
3. Excessive armaments which entailed heavy burdens on the people and developed political unrest.
4. Militarism and growth of military parties and military castes.
5. Conflict of Slav and Teuton races resulting from national aspirations for territorial expansion; racial antagonism.
6. Desire of certain rulers to put an end to internal strife by consolidating public opinion through the agency of a foreign war appealing to the patriotism of the people.
7. Desire to preserve the *status quo* in Europe by preserving the neutrality and independence of the smaller nations.
8. Revenge resulting from the former conflicts, such as the war of 1870 between the German states and France and the more recent Balkan wars.
9. Conflict of national ideals and systems of education.
10. Conflict of democracy as opposed to autocracy and bureaucracy.
11. Personal ambitions of men high in position, authority and power.
12. Persistent talk of war by newspapers and jingoists.
13. Publication of books which declare war to be a blessing, a necessity and a great factor in the furtherance of culture and power.
14. Formation of international alliances preventing the localizing of any conflict.

CLAIMS BY THE NATIONS. The diplomatic correspondence between the representatives of the nations involved consider very fully the immediate causes of the war. This correspondence is set forth in letters, notes and telegrams exchanged and also in statements made by the ministers and ambassadors, premiers, rulers and other high officials of the nations. Among the claims made in justification of the attitude assumed by the countries are the following:

SERVIA—That the growth of legitimate aspirations of the nation had always been hampered and to a great extent prevented by Austria-Hungary; that the dual monarchy had annexed Bosnia and Herzegovina, provinces inhabited chiefly by Slavs or races closely akin to the Serbs; that Austria-Hungary had taken a hostile attitude toward Servia and Montenegro in the late Balkan wars.

MONTENEGRO—That Austria-Hungary was chiefly responsible for compelling Montenegro to give up Scutari after its capture in April, 1913; that the dual monarchy had always been hostile to Montenegro.

AUSTRIA-HUNGARY—That the Servians and Montenegrins were continually plotting against the dual monarchy with the object of separating the Slav provinces from it and destroying its power; that to carry out this purpose they formed secret organizations for the purpose of fomenting discord in Bosnia, Herzegovina and other provinces; that Servia aided and abetted the plot to assassinate Archduke Ferdinand.

RUSSIA—That Servia was under the protection of Russia, which was bound to defend the smaller nation in case it was attacked by Austria-Hungary; that as the main Slavic power it was its duty to come to the defense of Servia, a Slavic state; that Austria-Hungary and Germany had been hostile toward Russia and its political and industrial progress.

GERMANY—That Austria-Hungary's war against Servia was just; that as the ally of the dual monarchy it was bound to come to its defense when threatened by Russia; that Russia had mobilized and was ready to attack not only Austria-Hungary but Germany; that France had mobilized and as the ally of Russia was preparing to attack Germany; that France had prepared for years to make war on Germany in revenge for the defeat of 1870; that the passage through Belgium was a legitimate military necessity; that Great Britain and France had themselves planned to transport their armies through Belgium in making war on Germany; that the triple entente had inclosed Germany in a "ring of iron" to prevent its expansion; that its

colonization plans had been hampered; that it was a fight between German culture and Russian barbarism; that it was virtually a fight for the very existence of the German empire.

Great Britain—That Great Britain was bound to defend the neutrality of Belgium; that it was important to sustain the balance of power in Europe by preserving the independence of the smaller nations, such as Belgium, Servia, Montenegro and other kingdoms; that it was bound to assist France if attacked under such circumstances as actually occurred; that it was a fight against German military preëminence; that it was a case of defending its own power and safety as a nation.

Belgium—That its honor, integrity and dignity as a nation required it to defend its neutrality and national independence.

Japan—That its alliance with Great Britain and the safety of its commerce as well as the preservation of peace in the far East compelled Japan to make war on Germany and take possession of Tsingtao, the capital of the German protectorate of Kiao-Chau, in China, and other places occupied by the German army and navy.

Turkey—That it had a right to attack Russia and recover some of the territory and prestige lost in the Balkan wars; that the integrity of the nation depended upon retaining possession of the Dardanelles and adjacent territory in Europe; that Russia and its allies were endeavoring to destroy the national existence of Turkey; that England had wrongfully taken possession of Egypt and other territory of the Ottoman Empire.

Triple Entente—The nations in the triple entente are France, Russia and England. As the triple alliance at the start was a dual alliance so the triple entente began with a dual compact between France and Russia, dating back to 1897. This had reference to mutual support in case of a war with Germany. Great Britain originally favored the triple alliance as against Russia, but the growth of better relations with France and of the feeling that Germany with its rapidly growing foreign commerce and its military strength was more dangerous to British supremacy than Russia led to a change of attitude. In 1904 an *entente cordiale* between Great Britain and France was brought about, and this was extended to include Russia, the understanding thus becoming a triple entente. The compact has been described more as the nature of a "gentlemen's agreement" than as a formal alliance. It left the governments free to determine for themselves whether to take part in a war affecting one or the other parties to the agreement or to remain neutral.

Triple Alliance—The nations in the triple alliance at the beginning of the war were Germany, Austria-Hungary and Italy. Prior to its formation, in 1884, Bismarck had brought about an alliance between Germany and Austria for the purpose of making a joint defense in case of either being attacked by Russia. Tunis was occupied by France, in 1881, and Italy, feeling itself isolated and threatened by this move, entered the Austro-German compact, which thus became a triple alliance. The terms of the treaty were never officially published, but it was renewed or extended from time to time, and it was reported, though not officially confirmed, that it was renewed in 1912 for a period of twelve years. In the meantime the relations of Italy and France had grown cordial, and in 1902 the government in Rome assured the president of the republic that in no case could Italy become either the instrument or the auxiliary of an aggression against France. An understanding was reached as to all Mediterranean and African questions, not only between Italy and France but between Italy and England. These relations were maintained and it was felt in Germany and Austria-Hungary that so far as concerned Great Britain and France and their ally Russia, Italy's adherence to the alliance could not be relied upon. It was announced in Rome on Aug. 1, 1914, that "Italy's obligations under the triple alliance applied only to a defensive war," and that therefore the country would remain neutral in the present war. In May, 1915, the government of Italy issued an edict to the effect that the country is no longer bound by the terms of the triple alliance.

Leading Events. The leading events of the great European war of 1914 and since may be classified as follows:

June 28—Archduke Francis Ferdinand assassinated.

July 23—Austria sends an ultimatum to Servia.

July 31—Russia orders general mobilization.

Aug. 1—Germany declares war on Russia; French cabinet orders general mobilization.

Aug. 2—German forces enter Luxemburg; Germany demands free passage through Belgium.

Aug. 4—England sends ultimatum demanding observance of Belgian neutrality; German troops attack Liege; President Wilson issues proclamation of neutrality.

Aug. 5—England announces a state of war with Germany; President Wilson tenders his good offices.

Aug. 7—Germans enter Liege; French invade southern Alsace.

Aug. 8—Italy reaffirms neutrality.

Aug. 15—Austrians enter Servia; Japan sends ultimatum to Germany.

Aug. 17—British expeditionary forces complete their landing in France; beginning of five days' battle between Servians and Austrians on the Jadar, ending in Austrian defeat.

Aug. 19—Beginning of the battle of Louvain.

Aug. 20—Germans enter Brussels.

Aug. 23—Germans enter Namur and begin attack on Mons; Austria announces victory over Russians at Krasnik.

Aug. 24—British begin retreat from Mons; Zeppelins bombard Antwerp.

Aug. 25—French evacuate Mulhausen.

Aug. 26—Nonpartisan French cabinet organized; Germans take Longwy.

Aug. 27—Louvain burned by Germans; Japanese blockade Tsingtao.

Aug. 28.—Naval battle off Helgoland.

Aug. 29—Russians defeated in three days' battle near Tannenberg.

Sept. 2—German advance reaches Senlis, thirty miles from Paris, and swings eastward; French government flees to Bordeaux.

Sept. 3—Russians occupy Lemberg.

Sept. 5—Battle of the Marne begins.

Sept. 7—Maubeuge captured by the Germans.

Sept. 12—German retreat halts on the Aisne.

Sept. 16—Belgian commission protests to President Wilson against the German policy in Belgium.

Sept. 20—Germans bombard Rheims.

Sept. 22—German submarine sinks British cruisers *Aboukir, Cressy* and *Hogue;* Russians capture Jaroslav and invest Przemysl.

Sept. 26—British troops from India land at Marseilles.

Sept. 28—Germans begin siege of Antwerp.

Oct. 2—Germans defeated at Augustowo.

Oct. 5—Belgian government removed from Antwerp to Ostend.

Oct. 7—Bombardment of Antwerp begins.

Oct. 9—Antwerp occupied by the Germans.

Oct. 12—A Boer commando in the Cape province mutinies.

Oct. 13—Belgian government transferred from Ostend to Havre.

Oct. 14—Allies occupy Ypres; battle begins on the Vistula.

Oct. 15—Ostend occupied by the Germans.

Oct. 16—British cruiser *Hawke* sunk by German submarine.

Oct. 24—Ten days' battle before Warsaw ends in German defeat.

Oct. 26—After a week of furious fighting German assaults between Nieuport and Ypres slacken.

Oct. 27—British dreadnought *Audacious* sunk off the Irish coast; South African sedition spreads, Gen. De Wet in revolt; Russians reoccupy Lodz and Radom.

Oct. 29—Turkey begins war on Russia by naval attacks on Odessa and in the Crimea.

Oct. 30—Col. Maritz, British opponent, driven out of Cape Colony.

Nov. 1—German naval victory off the coast of Chili; Turks bombard Sebastopol.

Nov. 3—German squadron makes a raid to British coast near Yarmouth.

Nov. 4—German cruiser *Yorck* strikes mine in Jade Bay and sinks.

Nov. 5—England and France declare war on Turkey; Dardanelles forts bombarded; Russians reoccupy Jaroslav.

Nov. 6—Tsingtao surrenders to the Japanese.

Nov. 10—The *Emden* destroyed.

Nov. 11—Germans capture Dixmude.

Nov. 12—Russians occupy Johannisburg in East Prussia; Russians defeated at Vlotslavek.

Nov. 15—Russians defeated at Lipno and Kutno; battle in Flanders attains climax with charge of the Prussian guard against Ypres.

Nov. 16—A holy war against allies proclaimed; house of commons votes a loan of £225,000,000.

Nov. 17—Austrian victory over Servians at Valjevo announced.

Nov. 19—House of commons votes a new army of 1,000,000 men; Germans pierce Russian center south of Lodz.

Nov. 23—Russians surround German corps south of Lodz.

Nov. 26—British battleship *Bulwark* destroyed by explosion in the Medway river; Germans break through Russian circle near Lodz.

Dec. 1—German reichstag votes new credit of five billion marks; King George in Flanders.

Dec. 2—Austrians occupy Belgrade; Gen. De Wet captured.

Dec. 3—Servians turn on Austrians in three days' battle which ends in a Servian victory.

Dec. 6—Germans occupy Lodz.

Dec. 8—British naval victory off Falkland Islands; British occupy Bussorah in Asia Minor.

Dec. 9—General Beyers, Boer leader, killed at the Vaal river.

Dec. 13—British submarine sinks the *Messudieh* in the Dardanelles.

Dec. 14—Servians capture large Austrian forces.

Dec. 15—Austrians evacuate Belgrade.

Dec. 16—German cruisers bombard Scarborough and Hartlepool.

Dec. 18—Egypt proclaimed a British protectorate; General Botha regards Boer rebellion at an end.

Dec. 20-26—Severe fighting on the line of the Bzura river.

Dec. 25—British naval and aerial raid against Cuxhaven; Russians defeat Austrian army at Tuchow near Tarnow; Italian marines occupy Avlona.

Events of 1915.

Jan. 1, 1915—British battleship *Formidable* sunk in the English channel.

Jan. 3—French capture Steinbach in Alsace.

Jan. 3-4—Russians win a decisive victory over Turks in the Caucasus; Russians overrun Bukowina.

Jan. 8—French advance across Aisne north of Soissons.

Jan. 14—French driven back across Aisne river, east of Soissons, after a week's battle.

Jan. 19—German air fleet bombards Yarmouth and other Norfolk coast towns.

Jan. 24—Naval battle in North sea, German armored cruiser *Blücher* sunk.

Jan. 30—Russians occupy Tabriz, Persia.

Jan. 30-31—German submarine sinks British merchantmen in the Irish sea.

Jan. 31—Russians forced back after heavy fighting near Bzura river.

Feb. 3—Russians deliver counter offensive near Bzura river.

Feb. 6—Failure of German attacks west of Warsaw.

Feb. 8—Beginning of battle in East Prussia, ending in Russian defeat and expulsion.

Feb. 18—German submarine blockade of Great Britain begins

Feb. 22—German announces a total of 104,000 Russian prisoners in the Mazur campaign.

Feb. 24—Russians driven from Bukowina.

Feb. 25—Allied fleets silence Dardanelles forts.

March 1—Premier Asquith announces reprisals against German trade; battle develops in Champagne.

March 6—Vinizelos, Greek premier, resigns.

March 10—German converted cruiser *Prinz Eitel Friedrich* reaches Newport News; British make notable advance at Neuve Chapelle.

March 14—The *Dresden* sunk near Juan Fernandez.

March 15—Germans gain in St. Eloi near Ypres; French army for Dardanelles lands in Egypt.

March 18—Three allied battleships sunk in heavy bombardment of Dardanelles.

March 21—Zeppelins bombard Paris.

March 22—Surrender of Przemysl to the Russians.

March 26—German sumbarine *U-29* with Commander Wediggen sunk.

March 28—German submarine sinks passenger steamer *Falaba* with loss of life.

March 31—Russians penetrate Dukla Pass and enter Hungary.

April 3—Turkish cruiser *Medjidieh* sunk in Odessa harbor.

April 4—Turks announce sinking of British battleship *Lord Nelson.*

April 5—French begin violent attacks east of Verdun and the Meuse.

April 7—The *Prinz Eitel Friedrich* interns at Newport News.

April 9—French storm German position at Les Eparges.

April 11—Total British casualties to date 139,347.

April 12—Germans renew bombardment of Ossowetz.

April 14—Russians at Sztropko, twenty miles inside Hungary.

April 14-15—Allied troops land in Turkey; total losses to date as computed by the International Bureau of Red Cross, Geneva: British allies, 6,609,500; German allies, 2,340,500.

April 15-16—Zeppelins drop bombs in English counties.

April 17—British victory at Hill 60.

April 18—Russians evacuate Tarnow.

April 22—Germans begin successful drive near Ypres.

April 25—Allied forces landed on both shores of Dardanelles.

April 30—Germans shell Dunkirk.

May 1—American ship *Gulflight* torpedoed off the coast of the Scilly islands.

May 2—Germans invade the Baltic provinces beyond Schavl; Austrians and Germans capture 30,000 Russians near Tarnow; Canadian losses in the second battle of Ypres aggregate 6,000.

May 4—Russians defeated on a 200-mile front in Galicia.

May 5—Losses of warships by the belligerents to date: British allies, 324,830 tons; German allies, 112,360 tons.

May 7—The *Lusitania,* a steamer of the Cunard line with passengers and contraband, sunk by a German submarine on the south coast of Ireland with a loss of 1,149 lives, including 113 Americans.

May 9—Libau, the fortified seaport of Courland, captured by the Germans.

May 12—It is announced officially that 108,760 Canadians have enlisted to enter the European war.

May 13—British battleship *Goliath* torpedoed and sunk by the Turks in the Dardanelles; President Wilson forwarded the official note regarding the *Lusitania* affair to Germany.

May 17—British admiralty announced the loss of merchant ships aggregating 460,628 tons.

May 18—Italy continues active preparations to intervene for the allies.

May 19—The government adopted the policy of forming a coalition cabinet in England.

May 21—Official reports from Vienna place the Russian prisoners captured in the battles of the Carpathians and the San at 194,500.

May 22—Germany and Austria-Hungary report the capture of 1,386,000 prisoners, including 1,008,000 Russians, 250,000 French, 52,000 Belgians, 50,000 Serbs and 26,000 British.

May 24—Italy entered the conflict on the side of the allies by declaring war against Austria-Hungary.

May 26—Italians invade Austrian Tyrol and Carinthia.

May 28—British battleship *Majestic* sunk in the Dardanelles; British battleship *Princess Irene* destroyed by an explosion in the harbor of Sheerness; Russian battleship *Panteleimon* sunk with 1,400 men in the Black Sea.

June 1—Preliminary reply of Germany to the American note relating to the *Lusitania* received at Washington.

June 3—Przemysl, the Austrian fortress which surrendered to the Russians March 22, 1915, recaptured by the Austro-German army.

June 8—William Jennings Bryan, United States Secretary of State, resigned because of disagreement with President Wilson's policy toward Germany.

June 16—The French captured some trenches near Souchez and other points north of Arras.

June 17—An Austrian submarine torpedoed and sunk the Italian submarine *Meduso.*

June 22—The Austro-Germans captured Lemberg, capital of Galicia, which has been occupied by the Russians since Sept. 3, 1914.

June 28—The British steamship *Armenian,* loaded with mules from the United States, torpedoed and sunk off Cornwall, England, by a German submarine, after attempting to escape.

June 28—Scutari, the most important town in Albania, occupied by Montenegrin troops.

July 1—Russian and German warships fought a naval engagement in the Baltic Sea, off the coast of Gothland, Sweden, near the Russian port Windau.

July 3—J. P. Morgan, the financier, is wounded in New York and a bomb is exploded in the national capitol at Washington, D. C., through the agency of Frank Holt.

July 5—The Austro-German army under Archduke Joseph Ferdinand suffered heavy losses at Krasnik under a Russian flank attack.

July 7—An Austrian submarine sunk the Italian cruiser *Amalfi* in the upper Adriatic Sea.

July 9—German Southwest Africa is surrendered by the commanding officers to Gen. Louis Botha, in command of the British colonial troops.

July 12—The German cruiser *Koenigsberg* destroyed in the Rufiji River, on the east coast of Africa.

July 13—The French lost important positions under the German offensive at Souchez Cemetery and in the Argonne Forest.

July 15—It is admitted by Germany that the *Nebraskan,* a United States merchant ship, was damaged by a torpedo, the commander assuming that as the vessel flew no flag it was English.

July 18—An Austrian submarine, while bombarding the railway north of Cattaro, sunk the Italian cruiser *Giuseppe Garibaldi.*

July 20—Windau, Russian fort on the Baltic, captured by the Germans; the great coal strike in Wales is settled.

July 25—The *Leelanaw,* an American merchant vessel, sunk by a German submarine, after warning had been given, as the vessel was carrying flax from Russia to Ireland, flax having been declared contraband.

July 30—The German prize court decided that indemnity would be paid for sinking the American vessel *William P. Frye;* Lublin, Russia, occupied by Austrian troops.

July 31—The *Iberian,* a British steamship, was sunk by a German submarine.

Aug. 1—The French still occupied a small section of German soil in Alsace and the Russians occupied a strip of land in eastern Galicia, while the Germans occupied 20,450 square miles in Belgium and France and 58,000 square miles in Russia and Poland.

Aug. 2—The Germans occupied Mitau, the capital of Courland, and began a drive southward toward Warsaw.

Aug. 6—Warsaw, the capital of Poland, occupied by German troops, no strong resistance having been offered, except at Praga, across the Vistula from Warsaw.

Aug. 7—Large forces of allied troops landed in Suvla Bay, on the northern shore of the Gallipoli Peninsula.

Aug. 9—A British submarine sunk the Turkish battleship *Kheyr-de-Din Barbarossa* at the entrance of the Sea of Marmora.

Aug. 10—A German mine sunk the British torpedo boat *Lynx* in the North Sea and a German submarine sunk the British cruiser *India* on the coast of Norway.

Aug. 13—The reply of the United States regarding the sale of munitions of war to belligerents is sent to Austria-Hungary, in which is set out the position that such traffic is legitimate and in the interest of its own future safety; a submarine sunk the British transport *Royal Edward* with a loss of 1,000 British soldiers.

Aug. 17—The Russian fortress Kovno with 400 cannon is captured by German troops.

Aug. 19—The *Arabic,* a steamship of the White Star Line, is sunk off the southern coast of Ireland by a German submarine; cotton is declared to be contraband by the allies.

Aug. 20—Nova Georgievsk, the Russian fortress, captured by German troops and about 85,000 prisoners taken.

Aug. 21—War declared by Italy against Turkey on the claim that the Turks had caused an insurrection in Libya; cotton made absolute contraband by Great Britain.

Aug. 23—Hostilities resumed by the Austrians against the Servians along the Save River.

Aug. 25—The Germans under Gen. von Mackensen captured the Russian port Brest-Litovsh, on the east bank of the Bug River; the fortress of Olita evacuated by the Russians.

Aug. 25—About 60 French aviators dropped bombs with much effect on Saar-Louis, Prussia, and at Mont Hulst Forest, Belgium.

Aug. 28—The Germans captured Lipsk, 20 miles west of Grodno; 10,000 Russians made prisoners in Galicia by the Austrians.

Aug. 30—The Galata Bridge at Constantinople shelled with much effect by the British.

Aug. 31—The Belgian Relief Commission in London reported that 2,750,000 persons in Belgium are in need of resources for their livelihood; Alphonse Pegoud, the noted French aviator, killed while in action in the air.

Sept. 2—Grodno, on the Niemen River, evac-

uated by the Russians; Brody, Galicia, captured by the Austrians.

Sept. 3—Saarbrucken, Rheinish Prussia, bombarded by 40 French aeroplanes.

Sept. 4—The *Hesperian,* an Allan Line steamer, sunk off the southern coast of Ireland, either by a mine or a German submarine.

Sept. 7—Dagö Island, near the entrance of the Gulf of Riga, evacuated by the Russians; German batteries on the coast of Belgium bombarded effectually by a British squadron.

Sept. 8—The Czar took command of the armies of all the Russias, superseding Grand Duke Nicholas, who was made viceroy and commander in chief of the Russian army in the Caucasus; gains made by the Russians at Tarnopol, Galicia.

Sept. 8—London attacked by a fleet of German airships, in the vicinity of Saint James Palace and Trafalgar Square, suffering much loss of life and property.

Sept. 10—The United States requested the government of Austria-Hungary to recall Constantin Theodor Dumba, the ambassador, on account of his activities in causing labor disturbances in munition factories.

Sept. 15—Much agitation in the United States regarding the request made by J. P. Morgan, the financial agent of England, for a loan to France, England and Russia.

Sept. 18—Pinsk, the Russian fort near the Pripet Marshes, captured by the Germans; the Russians begin to evacuate Vilna.

Sept. 30—A week of fierce fighting left the Allies victors in the Champagne region, while along most of the western front they were turned back to their old positions; both sides lost an enormous number of men in these attacks.

Oct. 5—Bulgaria entered the war on the side of the Teutonic Powers.

Oct. 5—Germany disavowed the sinking of the *Arabic* and agreed to pay indemnity to the United States for the Americans killed.

Oct. 6—Premier Venizelos of Greece resigned because his pro-Ally policy was not supported by King Constantine.

Oct. 10—Belgrade, the capital of Servia, captured by the Austro-Germans.

Nov. 19—Four-fifths of Servia occupied by the Austro-German and Bulgarian armies.

Nov. 27—Salonica, Greece, occupied by a French and British army, Greece protesting.

Dec. 4—Henry Ford, the automobile manufacturer, sailed for Europe to promote peace.

Dec. 15—Sir Douglas Haig succeeded Sir John French as commander-in-chief of the British in France.

Dec. 20—The forces of French and British troops withdrawn from the Gallipoli Peninsula, discontinuing the efforts to force the Dardanelles.

Events of 1916.

Jan. 13, 1916—Cettinje, the capital of Montenegro, occupied by the Austrians.

Jan. 26—The Compulsory Service Law became effective in Great Britain.

Feb. 16—Erzerum, Armenia, captured by the Russians.

Feb. 21—The great battle of Verdun commenced by the Germans under Crown Prince Friedrich Wilhelm.

Feb. 26—Duruzzo, the capital of Albania, captured by the Austrians.

March 8—Germany declared war again Portugal because of a series of breaches of neutrality.

April 6—It is reported that Canada has raised a total of 300,000 men for over-sea service.

April 18—Trebizond, the Turkish fortification on the Black Sea, seized by the Russians.

April 23—Turkish forces captured Quatia, Egypt, near the Suez Canal, from the British.

April 26—The Irish revolution commenced at Dublin and martial law declared in Ireland.

April 28—British troops under General Townshend surrendered Kut-el-Amara to the Turks.

May 12—British military authorities report that James Connolly, commander-in-chief of the Irish revolutionists, and fifteen of his associates have been executed; Premier Asquith arrived in Dublin and ordered postponement of further court martial.

May 14—The controversy between President Wilson and Germany in regard to submarine warfare is considered settled.

May 16—President Wilson and his cabinet discuss the interference of Great Britain with the mails on the high seas, having protested against it.

May 19—The Austrians gain ground by an offensive against the Italians in the Trentino region.

May 31—Battle between the British and German fleets in the North Sea, off the coast of Denmark, in which the Germans lost 3,000 and the British lost 5,000 men; the loss of tonnage is reported about equal.

June 5—General Kitchener drowned off the Orkney Islands, where the cruiser *Hampshire* was sunk, while on a mission to Russia.

June 20—The Russians captured Czernowitz and over-ran the larger part of Bukowina.

July 5—Extensive offensive movement developed by the British, French and Russians.

Sept. 29—General von Falkenhayn defeated the Rumanians near Hermannstadt, taking many prisoners.

Oct. 7—British and French troops advance on a ten-mile front in the Somme district, France.

Oct. 16—The revolutionary government set up in Greece by Venizelos is recognized by the Entente Allies.

Oct. 26—The Rumanians repulsed near the Danube, at Cernavoda, after Constanza, on the Black Sea, was captured by General von Mackensen.

Oct. 28—Fort Douaumont and other strong places captured by the French in the advance at Verdun.

Nov. 1—Conscription defeated by a popular vote in Australia.

Nov 21—Death of Francis Joseph; he was succeeded by Charles I. as emperor of Austria-Hungary.

Dec. 5—Bucharest, capital of Rumania, occupied by an allied Teuton army under General Von Mackensen; it was announced that 50,000 square miles of Rumanian territory had been occupied by the Germans and their allies.

Dec. 6—David Lloyd George made premier of Great Britain, succeeding Herbert Henry Asquith, resigned.

Dec. 10—The submarine *Deutschland* returned to Bremen, completing the second return voyage from the United States.

Dec. 12—Archduke Charles Stephen of Austria chosen to be regent of Poland, with the prospect of future election as king.

Dec. 12—Germany, with the consent of her allies, offered to enter peace negotiations with the hostile countries.

Dec. 18—President Wilson addressed an identic note to the belligerents, expressing the hope that they would find early occasion to diclose their objects and state their views, offering any good offices that might be desired to obtain the future peace of the world.

Dec. 21—Germany, in response to President Wilson's note, proposed "an immediate meeting of delegates of the belligerent states at a neutral place" in order to end the war.

Dec. 26—Ten of the Entente Allies replied to the German peace note; they stated that they had tried to avert war in the first place and now refused to consider peace proposals until they were assured of entire sincerity on the part of their enemies.

Events of 1917.

Jan. 2—The Kingdom of Hejis, in Arabia, set up at Meca in July, 1916, was officially recognized by France, Great Britain and Italy.

Jan. 18—The total Canadian casualties in the war were reported at 68,290, including 14,864 killed and 48,454 wounded.

Jan. 15—The council of the Entente Allies at Rome, Italy, decided to depose King Constantine of Greece.

Jan. 21—A statement was published by Premier Borden to the effect that Canada had recruited an army of 434,539 men.

Jan. 22—President Wilson, in an address before the United States senate, stated in regard to the war in Europe, "First of all, it must be a peace without victory; outlets to the sea should be neutralized; the paths of the seas must alike in law and effect be free; and military as well as naval armaments must be limited."

Jan. 31—Germany declared that "From Feb. 1, 1917, sea traffic will be stopped with every available weapon and without further notice" (without warning), in zones around Great Britain, France, Italy and in the eastern Mediterranean; American passenger ships will be undisturbed if they sail once a week, bear certain markings, take a prescribed course, land only at Falmouth, arrive on Sunday and depart on Wednesday, and carry no contraband.

Feb. 3—The United States severed diplomatic relations with Germany, on the ground that the announcement of Jan. 31, 1917, withdrew the assurances of May 4, 1916, in which Germany agreed to confine war operations to the fighting forces of the belligerents.

Feb. 4—President Wilson, in an official note to the neutral nations, expressed the belief that it would make for the peace of the world if they severed diplomatic relations with Germany as the United States had already done.

Feb. 12—Germany announced that the period of grace in the war zone had expired, and that "shipping can no longer expect individual notice."

Feb. 12—The United States refused the request of Germany to discuss matters of difference between the two nations, unless Germany would first withdraw from the proclamation of Jan. 31, 1917.

Feb. 25—General Maude, the British commander in Mesopotamia, captured Kut-el-Amara from the Turks; General Townshend had surrendered this fortress on April 28, 1916.

Feb. 28—Information was published at Washington, D. C., that Germany had invited Mexico and Japan into an alliance, in the event that the United States should enter the war on the side of the Entente Allies.

Mar. 3—Hamadan, in Persia, near the frontier of Turkey, was captured by the Russians.

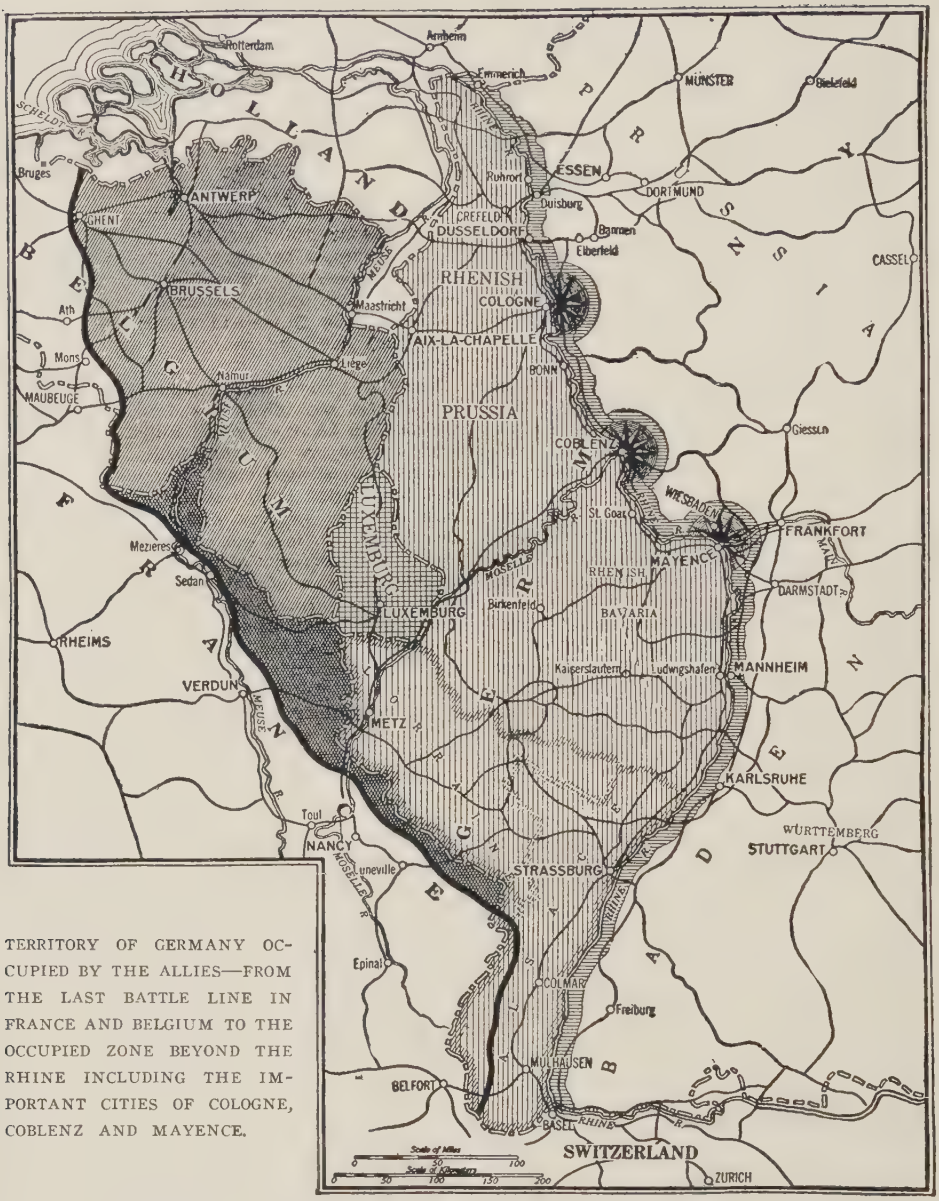
Mar. 11—Bagdad, in Mesopotamia, was captured from the Turks by the British under General Maude.

Mar. 15—The revolution in Russia, which was due in part to the pro-German sentiment of the government and in part to wide-spread unrest among the laboring classes, Nicholas II., czar of Russia, was compelled to abdicate the throne for himself and for his son in favor of his brother, Grand Duke Michael Alexandrovitch.

Mar. 16—Grand Duke Michael Alexandrovitch renounced the throne of Russia until such time as a constitutional assembly, on a basis of universal suffrage, shall establish a form of government.

Mar. 19—The Germans evacuated an area of 1,300 square miles in France, from Arras to Soissons, on a front of 100 miles.

Mar. 22—The United States formally recognized the Republic of Russia, which had been formed by the executive committee of the duma; the czar and the empress were imprisoned in Petrograd.



TERRITORY OF GERMANY OCCUPIED BY THE ALLIES—FROM THE LAST BATTLE LINE IN FRANCE AND BELGIUM TO THE OCCUPIED ZONE BEYOND THE RHINE INCLUDING THE IMPORTANT CITIES OF COLOGNE, COBLENZ AND MAYENCE.

Article 5 of the armistice provides for the evacuation by the German armies of the countries on the left bank of the Rhine. These countries on the left bank of the Rhine shall be administered by the local authorities under the control of the Allied and United States armies of occupation. The occupation of these territories will be determined by Allied and United States garrisons holding the principal crossings of the Rhine—Mayence, Coblenz, Cologne—together with bridgeheads at these points in thirty kilometer radius on the right bank and by garrisons similarly holding the strategic points of the region.
(Method Book, Opp. 729)

Mar. 29—In an address before the Reichstag, Chancellor Von Bethmann-Hollweg declared that Germany did not desire war with the United States and shall not bear the responsibility of it.

Mar. 31—The United States took possession of the Danish West Indies, renaming them the Virgin Islands, expecting to use them as a base for the protection of the Panama Canal.

Apr. 6—President Wilson signed a joint resolution of congress which declared that a state of war existed with Germany; the same day ninety German ships in American ports were taken over by the United States.

Apr. 9—Vimy Ridge, near Arras, captured by the British, including about 6,000 German prisoners.

Apr. 28—About 200 congressmen cabled Premier Lloyd George, expressing the interest America has in the settlement of the questions pertaining to the welfare of Ireland.

May 2—The fortress of Mush, in Armenia, was recaptured from the Russians by the Turks.

May 9—The total Canadian losses in the war, including those sustained in the battle of Vimy Ridge, were officially reported at 89,843 men.

May 13—A. A. Karensky, Russian minister of justice, declared in an appeal to the soldiers that "As affairs are now going, it will be impossible to save the country."

May 18—President Wilson signed the bill which legalized conscription under the so-called selective system.

May 26—The Italians began a larger offensive on the Isonzo, where they captured territory and many Austrian prisoners.

June 7—By vast mine explosions on the front at Wytschaete-Messines, the British captured important German positions dominating Ypres from the south.

June 9—General Pershing and his staff arrived in England, enroute to France, the purpose being to study war conditions and to prepare for the arrival of American troops.

June 12—Constantine, king of Greece, abdicated the throne in favor of his second son, Alexander, at the demand of England, France and Russia.

June 15—The American mission, headed by Elihu Root, reached Petrograd, having made the trip over the Pacific Ocean and by way of the Trans-Siberian Railway.

June 5—About 10,000,000 men registered under the conscription law of the United States; this included all men between the ages of 21 and 30 years.

June 20—The first American war loan (subscriptions closed June 15, 1917), authorized to the extent of $2,000,000,000 was oversubscribed $1,035,226,850.

June 25—Substantial advance made in the battle of Lens, France, where the Canadians advanced on a front of nearly two miles.

July 1—General Karensky inaugurated a new campaign against Galicia, in which Halicz, much territory and many prisoners were captured.

July 13—A formal order issued by the war department, drafting 678,000 men into the service, the object being to bring the combined armies of the United States up to 1,236,000 men.

July 14—Theobald von Bethmann-Hollweg resigned as chancellor of Germany, after serving eight years; he was succeeded by George Michaelis.

July 19—A report given out by the shipping department at Washington, D. C., under the direction of the chairman, estimated the destruction of merchant shipping by submarines at 1,000,000 tons per month.

July 19—The diet of Finland, after several executive sessions, proclaimed the independence of that country from Russia.

July 23—Premier Karensky was given absolute power to manage the affairs of Russia; thousands of Russian soldiers are shot for refusing to obey orders from their commanders.

July 26—The German offensive against the Russians drove the invaders back fifty miles in a week, northward in Volhynia and southward in upper Rumania.

July 31—An extensive offensive launched in the west by the French and British, where the Canadians (on August 15th) captured Hill 70 and the British gained possession of Langemarck.

Aug. 3—The official German report announced the recapture of Halicz, in Galicia; Czernowitz, in Bukowina; and the occupation of much new territory in Volhynia and Padolia.

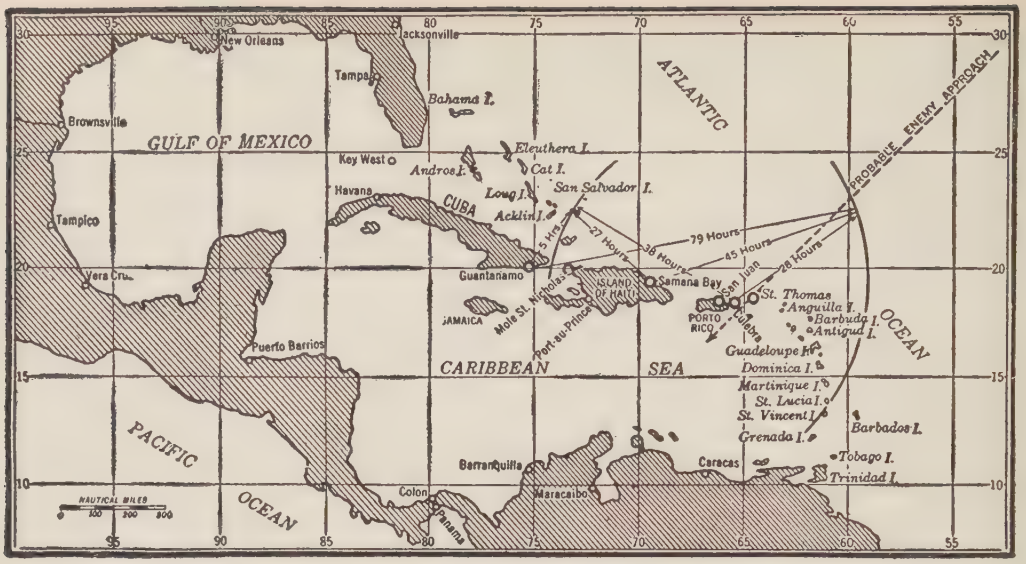
Aug. 14—War declared by China against Germany, the avowed purpose being to obtain respect for international law.

Aug. 14—Owing to the discovery of a monarchial plot, Nicholas, the deposed czar of Russia, was removed as a prisoner to Tobolsk, Siberia.

Aug. 15—An appeal for peace to the belligerent nations made public by Pope Benedict, in which he suggested general disarmament, the evacuation of Belgium and northern France, the return of the German colonies, and the conciliatory settlement of political and territorial questions.

Aug. 18—The large Canadian munition plant at Ribaud, near Montreal, was destroyed by an explosion.

Aug. 28—The conscription law, providing for compulsory military service, in Canada, was signed by the governor-general, the Duke of Devonshire.



MAP OF THE WEST INDIES, SHOWING ST. THOMAS, THE LARGEST OF THE VIRGIN ISLANDS

THE VIRGIN ISLANDS

The Virgin Islands, formerly the Danish West Indies, were discovered by Columbus in 1494, acquired by Denmark in 1754 and transferred by Denmark to the United States in 1917. The principal islands of this group are St. Thomas, St. Croix, Crab and Culebra; the group includes about fifty other islets and reefs. This group of islands is important to the United States as a defense of the Panama Canal and the object is to fortify them for such purpose. The price paid Denmark for these islands was $25,000,000.

Aug. 29—President Wilson made public the reply of the United States to the peace message of Pope Benedict, the general purport being a declination of the proposition to enter peace negotiations with the German government, unless the German people themselves in some positive way signify that it is their will and purpose to enter into negotiations for an enduring peace.

Sept. 2—State troops were called out by Governor Lowden of Illinois, to disperse a meeting of the People's Council of America for Peace and Democracy, at Chicago, the avowed purpose of the organization being to promote peace and democracy; those opposing the meeting alleged that its purpose was to interfere with the government in prosecuting the war in Europe.

Sept. 3—The Baltic port city of Riga, on the Gulf of Riga, captured from the Russians by combined land and sea forces under Crown Prince Leopold of Bavaria.

Sept. 10—Large bodies of American volunteer and conscripted soldiers concentrated for training at cantonments; many of these troops, after training, were transported to the battlefields of Europe, more particularly to France.

Sept. 14—The extensive rebellion, headed by General Korniloff, was suppressed, followed by many arrests of Russian officials.

Sept. 17—General strike at the shipbuilding yards in San Francisco, in which 25,000 men participated; the controversy was settled by the government increasing the pay of the workmen.

Sept. 20—The government of Russia proclaimed a republic under a cabinet of ministers, Premier Kerensky officiating as prime minister and president.

Oct. 10—Premier Kerensky, head of the coalition ministry, assumed control of public affairs in Russia; the capital was removed from Petrograd to Moscow.

Oct. 16—A report issued from Washington verified the successful transportation of 100,000 American soldiers to France; the American transport *Antilles,* homeward bound under convoy, was torpedoed by a submarine and seventy lives were lost.

Oct. 26—War was declared by Brazil against Germany, following the sinking of the fourth Brazilian merchant vessel by a German submarine, in the Bay of Biscay.

Oct. 27—Subscriptions to the second Liberty Loan in the United States were closed, totaling $4,617,552,300 from 9,500,000 subscribers.

Oct. 24—Defeat of the Italians south of Tolmino, on the Bainsizza Plateau, with a loss of 500 cannon and 65,000 prisoners; this was soon followed by the Austro-German occupation of Gorizia.

Oct. 31—The British under General Allenby, with an army from Egypt, captured Beersheba, in Palestine.

Nov. 3—The first clash between American and German soldiers occurred at the Rhine-Marne Canal, resulting in the defeat of the Germans; three Americans were killed and eleven were wounded and captured.

Nov. 6—Austro-German forces captured the entire front along the Tagliamento River, including 2,300 guns and 250,000 prisoners; the Italian army thereupon reformed behind the lower Piave River, preventing the advance of the enemy upon Venice.

Nov. 9—The conference at Rome created the Supreme War Council of the Allies, including as military representatives General Cadorna for Italy, General Foch for France and Major-General Wilson for Great Britain; General Armando Diaz became commander-in-chief of the Italian armies.

Nov. 10—The Bolsheviki gained the second revolution of Russia and Nikolai Lenine became premier and Leon Trotzky was made minister of foreign affairs; Finland declared in favor of independence from Russia.

Nov. 20—General Byng with British forces moved forward against Cambrai, employing large numbers of tanks and captured 8,000 Germans. In this campaign the Canadian forces rendered valuable and effective service at strategic places.

Dec. 6—Halifax, Nova Scotia, was greatly damaged by the explosion resulting from the collision of two munition ships in the harbor, causing the death of 1,266 persons.

Dec. 7—War was declared against Austria by the United States Congress.

Dec. 10—Jerusalem surrendered by the Turks to the British; Japanese troops landed at Vladivostok, Russia; an armistice concluded between Germany and Rumania.

Dec. 15—Russia and the Central Powers concluded an armistice at Brest-Litovsk.

Dec. 17—The election in Canada resulted in the return of Sir Robert Borden and confirmation of the Conscription Law by a heavy vote; the liberal party supported Sir Wilfrid Laurier.

Dec. 22—In the referendum whether conscription should be established in Australia the decision was against the proposal, 889,000 votes being for conscription and 1,072,000 against it; the seventh German war loan totaled $3,156,415,000.

Dec. 22—A peace conference assembled at Brest-Litovsk in which Russia and all the members of the Central Powers participated.

Events of 1918.

Jan. 7—Earl Reading was appointed special ambassador from England to the United States.

Jan. 21—Extensive strikes developed in Austria on account of food shortage; Sir Edward Carson resigned from the British cabinet because of disagreement regarding the Irish question.

Jan. 28—Widespread strikes took place in Berlin and other large cities of Germany to force a discontinuance of the war; it was reported that 1,500,000 American soldiers had reached France.

Feb. 3—The church and state were separated in Russia by a decree of the soviet, religious instruction in public schools was forbidden, and religious freedom was granted to all classes.

Feb. 5—The British transport *Tuscania,* carrying 2,200 American soldiers under convoy, was sunk by a German submarine off the coast of Ireland with a loss of 170 American soldiers.

Feb. 9—The first peace treaty of the war was signed at Brest-Litvosk by Ukrainia and the Central Powers, whereby that region of Russia became recognized an independent government.

Feb. 11—Russia officially announced that the war with the Central Powers was ended and ordered complete demobilzation of her armies; this peace and the work of the conference at Brest-Litovsk was not recognized by the Allies.

Feb. 20—British troops occupied Jericho, fourteen miles north of Jerusalem; an agreement was concluded between the United States and Norway whereby exports from Norway to Germany were curtailed.

March 2—Peace was concluded at Brest-Litovsk between Russia and the Central Powers, whereby nearly one-fourth of European Russia was surrendered, establishing the independence of Finland, Ukrainia, Poland, the Aland Islands and the Baltic Provinces of Courland, Esthonia and Livonia.

March 5—Peace was established between Rumania and the Central Powers, including the conditions that Rumania surrender Dobrudja as far as the Danube, rectify the eastern boundary with Austria-Hungary, grant trade routes to the Black Sea and receive concession in Bessarabia.

March 14—Erzerum, the principal city of Armenia, was seized by the Turks; the Russian congress at Moscow ratified the peace treaty with the Central Powers with a vote of 453 to 30.

March 20—By proclamation of President Wilson, the United States seized about 600,000 tons of ships belonging to Holland, to be used as transports, promising full compensation.

March 21—The most stupendous campaign of the war inaugurated by the Germans on the west front, on the fifty-mile line from Arras to La Fére. The campaign consisted of four distinct drives and included hard-fought battles at Armentières, Albert, Montdidier, Passchendaele, the Marne and the Somme; long range guns were employed at Loan to bombard Paris, a distance of seventy miles.

March 29—General Ferdinand Foch was made generalissimo of all the Allied troops in France, including the American, which had been offered by General Pershing for service "in the greatest battle of history."

April 5—The American army at the end of the first year of war totaled 127,700 officers and 1,500,000 men; in a speech at Baltimore at a Liberty Loan meeting, President Wilson stated America would challenge German with "Force to the utmost."

April 12—Field Marshal Haig, the British commander, issued a special order to his army in which he stated, "With our backs to the wall, each one of us must fight to the end"; Helsingfors, capital of Finland, was captured by a German army.

April 13—American forces repulsed a German attack at St. Mihiel; it was announced that the *Cyclops,* an American ship with 293 persons on board, was lost without a trace.

April 16—Messines Ridge, near Ypres, was evacuated by the British; large forces of men were sent from Italy to France, where they were stationed on the right wing of the army, near Switzerland.

April 23—Zeebrugge, the German submarine base on the North Sea, was attacked at night by the British, who blocked the channel by sinking concrete-laden vessels; Mont Kemmel, southwest of Ypres, was lost by the British.

May 4—The Third Liberty Loan campaign was ended with a total of $4,170,000,000 from 17,800,000 subscribers.

May 14—The American troops in France exceeded 500,000; Pola, the Austrian naval base on the Adriatic, entered by the Italians, who sank an enemy battleship.

May 25—German submarines began operating off the eastern coast of America, sinking many vessels, mostly sailing vessels.

May 28—Soissons was lost to the Germans, who reported the capture of 25,000 prisoners; the American transport *President Lincoln* was sunk by a submarine off the French coast.

June 6—The German armies advanced to the Marne and began to push westward; they were defeated in an engagement at Chateau-Thierry by American marines.

June 14—Tabriz, Persia, was occupied by the Turks; American troops in France exceeded 800,000 men.

June 19—The French repulsed the Germans in an attempt to capture Rheims; the Austrian offensive against the Italians along the Piave resulted in failure.

June 26—The Austrians withdrew across the Piave, having lost many men; the British transport *Dwinsk* and the Canadian hospital ship *Llandovery Castle* reported torpedoed by German submarines.

GENERAL FERDINAND FOCH.

The subject of this sketch was born near the border of Spain, in the region of the Pyrenees Mountains, Oct. 2, 1851, and is of Basque descent. He became an artilleryman and took part in the defense of Paris in 1871, then only twenty years of age. All his active life he was identified with the army of France, rising rapidly in important positions, and is author of several authentic books on military science and strategy. He commanded throughout the World War and in 1918 was made general commander of all the Allied armies in France.

(M. B. between 728-739)

July 4—In an address at Mount Vernon, President Wilson stated regarding peace terms that they must be founded upon "The reign of law, based upon the consent of the governed and sustained by the organized opinion of mankind"; American marines landed at Kola, near Archangel, Russia.

July 6—French and Italian troops began to move forward in Albania; the Czecho-Slovaks organized as a potent force in Siberia.

July 15—The Germans resumed their drive toward Paris; an American counter attack forced 15,000 back across the Marne; Quentin Roosevelt was killed in an airplane fight over the German lines.

July 19—The British liner *Justicia,* used as a transport, was sunk by a submarine off the coast of Ireland; an official report confirmed the death of Nicholas Romanoff, ex-czar of Russia, who was shot at Ekaterinburg, July 16, 1918.

July 21—American and French troops defeated the Germans at Chateau-Thierry, driving them out of the region adjacent to the Marne and winning one of the great decisive battles of the war.

Aug. 2—Soissons was recaptured by the French, and the Germans were forced to begin a general retreat on the west front.

Aug. 5—General Foch was made marshal of France; the Germans retreated across the Vesle and abandoned the line between Rheims and Soissons.

Aug. 10—The gigantic Allied drive was well under way, capturing Montdidier and advancing fourteen miles in three days.

Aug. 16—The efficiency of flying machines equipped with the Liberty motor was demonstrated by American aviators in air raids behind the German lines; it was reported that 1,450,000 American soldiers had reached France.

Aug. 22—The Germans were defeated between the Oise and the Aisne rivers; the French captured Lassigny and the British captured Albert.

Aug. 27—Three treaties to supplement the Brest-Litovsk treaty were signed by Russia and Germany at Berlin; the Allies reported the capture of 1,300 guns and 112,000 prisoners.

Aug. 29—Noyon was captured by the French, Bapaume by the British, and Juvigny by the Americans.

Aug. 31—The Man Power Bill was signed by President Wilson, requiring all men between 18 and 46 years of age to register; September 12th was fixed as registration day.

Sept. 3—The Czecho-Slovaks were recognized formally as a people by the United States; a large contingent of American troops was landed at Archangel, Russia.

Sept. 12—An American army force occupied St. Mihiel, which had been held by the Germans four years, capturing 15,000 prisoners and recovering 150 square miles of French territory. This was the first great independent offensive of the Americans and showed their excellent fighting qualities; thirteen million Americans of 18 to 21 and 31 to 45 years were registered under the amended Selective Draft Act.

Sept. 14—All belligerent governments were invited by Austria-Hungary to a confidential peace conference in a neutral country; Baku, the Russian port on the Caspian, evacuated by the British.

Sept. 15—French and Servian troops defeated the Bulgarians and captured many prisoners; the Americans cannonade Metz, the great fortress of Lorraine.

Sept. 22—The British crossed the Jordan, in Palestine; it was announced that 265 guns and 40,000 Turks were captured by the British in the Palestine offensive.

Sept. 26—Servian and French armies in Macedonia captured 10,000 Bulgarians; the British army invading Bulgaria captured Strumnitza.

Sept. 29—Bulgaria withdrew from the war, surrendering to the Allied commander, General d'Espery, accepting purely military terms until the issues involved shall be settled by the peace conference.

Oct. 1—Saint Quentin was captured by the French; the British captured Damascus and 7,000 Turks.

Oct. 2—Count von Hertling resigned as chancellor of Germany and was succeeded by Prince Maximilian of Baden; Italian and British fleets captured Durazzo and destroyed many Austrian warships.

Oct. 4—Ferdinand, king of Bulgaria, abdicated in favor of his son, Prince Boris; the great shell loading plant at South Amboy, New Jersey, was destroyed with a loss of $25,000,000.

Oct. 5—Chancellor Maximilian of Germany requested President Wilson to assist in restoring peace, accepting as a basis the program set forth in his message to Congress Jan. 8th and his speech of Sept. 27th; similar requests were made by Turkey and Austria-Hungary. In July, 1916, Germany had already declared in favor of peace on the basis of no annexations and no indemnities, and the program of Prince Maximilian now was to accept the fourteen peace conditions announced by President Wilson, together with willingness to join in a league of nations; to support the rehabilitation of Belgium, particularly its independence and territorial integrity; and to agree that the peace treaties hitherto concluded with Russia and Rumania shall not be permitted to hinder in the conclusion of general peace.

Oct. 6—A German submarine sunk the American freighter *Ticonderoga* in mid-ocean, causing the loss of 243 lives; a collison between the British transport *Otranto* and a passenger steamer off the coast of Scotland caused the loss of 221 lives, including 57 American soldiers.

Oct. 9—Cambrai evacuated by the Germans; Frederick Charles of Hesse was elected king by the Finnish Landtag; a German submarine sunk the *Leinster,* a British mail steamer, off Ireland, with a loss of 480 lives.

Oct. 14—Correspondence between President Wilson and Dr. Solf, foreign secretary of Germany, made it clear that the peace movement was supported by the majority of the Reichstag and was in accord with the wishes of the government and the people. He emphasized the recent changes in the form of the German government, involving equal franchise, responsibility of the chancellor to the Reichstag, and the consent of the people in decisions on war and peace.

Oct. 19—Bruges and Zeebrugge, the bases of the German navy on the North Sea, were captured by the Allies; the campaign for the Fourth Liberty Loan in the United States was closed, in which the desired sum of $6,000,000,000 was greatly oversubscribed, the total subscription being $6,866,416,300, from more than 21,000,000 persons.

Oct. 21—The total credit advanced by the United States to the Allies reached $7,520,000,000.

Oct. 29—Large Italian and British armies crossed the Piave and defeated the Austro-Germans in decisive battles, capturing 7,000 cannon, 250,000 horses and 400,000 prisoners of war.

Oct. 31—The government of Turkey agreed to an unconditional surrender to the Allies, following a general defeat of her armies in Palestine, including by its terms the occupation of Constantinople and the Dardanelles.

Nov. 1—The revolution began throughout Austria-Hungary; the Czecho-Slovak government was organized in Bohemia and Moravia; Count Tiza was assassinated at Budapest.

Nov. 3—General Diaz, representing the Italian army, received the surrender of the principal Austro-Hungarian army near the border of Venetia and Tyrol; Trent and Udine were occupied by the Italians.

Nov. 4—Austria-Hungary withdrew from the war and agreed to preliminary peace terms, which included the demobilization of her army, the evacuation of invaded territory, and the surrender of all prisoners of war and many ships.

Nov. 7—The German army was defeated in France and retreated on a 75-mile front, from the Scheldt to the Aisne River; the United States officially notified Germany that the Allied governments had declared their willingness to make peace on the terms laid down in President Wilson's addresses, except that the question of the freedom of the seas must be referred to the peace conference and that Germany must compensate for the damage done to civil population and property.

Nov. 8—American troops entered Sedan; King Ludwig of Bavaria was deposed by a decree of the diet; the socialists of Germany demanded the abdication of Emperor William II.

Nov. 9—The total strength of the American army was reported at 3,764,677 men, of which 2,200,000 were overseas in France, Italy and Russia; Emperor William abdicated and sought refuge in Holland; a government was organized at Berlin with Frederich Egbert as chancellor pending the creation of a constitutional national assembly.

Nov. 11—The Great European War (World War) ended at 11:00 o'clock a. m., Paris time, following the signature (at 5:00 a. m.) of the armistice by General Foch as commander of the Allied armies and the German delegates; the place of signature was within the French lines.

Nov. 11—The terms of the armistice were such that the renewal of hostilities by the Central Powers became impossible. They included the surrender of all prisoners of war, the evacuation of invaded territory, the evacuation by Germany and the occupation by local troops of the region of Germany lying west of the Rhine, including the cities of Cologne, Coblentz and Mayence, and the occupation of a neutral zone on the east bank of the Rhine by American and Allied local troops. It also included the surrender of much war and other material, such as 5,000 guns, 25,000 machine guns, 1,700 airplanes, all submarines and practically the entire fleet, 50,000 railway cars, and many stores of food and war materials.

Nov. 12—Emperor Charles abdicated the throne of Austria-Hungary; Constantinople was occupied by the Allied fleet.

Nov. 18—Demobilization of the American army began; President Wilson announced that he would sail for Europe to take part in the discussion and settlement of the main features of peace at the conference to be held at Versailles.

Nov. 21—William G. McAdoo resigned as Secretary of the Treasury: he was succeeded on Dec. 16th by Carter Glass (born in 1857), who formerly was representative in Congress and United States senator from Virginia.

Nov. 22—Under the armistice, the German fleet surrendered to the Allies, including a total of seventy-one vessels; Albert, king of Belgium, returned to Brussels after that city had been occupied for four years by the German army of occupation.

Nov. 29—Announcement was made from Washington that the American representatives at the peace conference were to consist of the following:

Woodrow Wilson, President of the United States.
Robert Lansing, Secretary of State.

Henry White, former Ambassador to France.
Edwin M. House, special representative of President Wilson.
General Tasher M. Bliss, military representative.

Nov 30—General Pershing reported the total American casualties in the war at 236,117. They consisted of 36,154 killed, 14,811 deaths by disease, 2,204 deaths unclassified, 179,625 wounded, 1,163 prisoners and 1,160 missing; these losses include only those in the American expeditionary forces and to these must be added several thousand deaths from disease and other causes in the American cantonments and hospitals.

Dec. 4—President Wilson sailed from New York for Europe, on board the steamer *George Washington,* to attend the peace conference at Versailles. He landed at Brest, France, Dec. 13th, and made visits to England, France, Italy and other countries before the peace conference convened.

Dec. 15—Sidonio Paes, president of Portugal, was assassinated at Lisbon; the aggregate of all the war loans of the United States to the Allies was reported at $8,223,540,702.

Dec. 20—The official report placed the British war losses at a total of 3,049,991 men and officers, consisting of 658,704 killed, 2,032,142 wounded and 359,145 missing.

Dec. 20—France, according to the official report, mobilized a total of 6,900,000 men and officers; out of this number 1,400,000 men and officers were killed.

Dec. 22—During the period of the war Canada sent 408,500 soldiers overseas and had 60,000 men in training when the armistice was signed on Nov. 11, 1918. The casualties of Canada were reported at 220,183, including 60,383 deaths and 3,575 prisoners.

Dec. 22—Russia sustained the heaviest losses, a total of 9,150,000, including 1,700,000 killed, 1,450,000 disabled and 2,500,000 taken as prisoners.

Dec. 24—The German war losses were reported at 5,980,600, which included 1,456,100 killed and 3,426,420 wounded; nearly two-thirds of the losses were Prussian; Germany restored $91,000,000 in gold to Belgium.

Dec. 26—The Austro-Hungarian losses, according to official reports, reached 4,009,500, including eighteen generals.

Dec. 28—Demobilization of the American army proceeded at the rate of 200,000 men per month; 150,000 American troops returned per month from Europe.

Events of 1919.

Jan. 3—Captain Lang, an American aviator, reached the highest record in aviation, a height of 30,500 feet, which he did in a British airplane at Ipswich, England, accompanied by Private Blowers. The former highest point reached by a military airplane was in 1914, when Heinrich Oelerich, a German ace, reached an altitude of 26,246 feet.

Jan. 6—Theodore Roosevelt, author and former president of the United States, died suddenly at his home in Oyster Bay, New York; his decease was mourned throughout the country.

Jan. 6—The election returns in Great Britain assured the support of the country for the coalition party and Lloyd George as prime minister; in Ireland the Sinn Feiners gained a sweeping majority, securing seventy-three seats in the national parliament, while the nationalists, or British party, secured only nine seats.

Jan. 10—Estimates made by French statisticians placed the entire cost of the war for all nations involved at $160,500,000,000; at the same time the cost for the United States was estimated at $20,560,500,000.

Jan. 12—The national debt of the leading countries at the close of the war, on Nov. 11, 1918, was stated as follows:

	Debt	Interest Per Capita
Japan	$ 1,300,000,000	$ 4.60
Italy	7,010,000,000	28.00
United States	15,500,000,000	6.00
Austria-Hungary	20,100,000,000	80.00
France	23,210,000,000	35.40
Russia	25,450,000,000	63.50
Germany	30,600,000,000	38.70
Great Britain	36,675,500,000	40.70

Jan. 15—The conservative republican party secured undisputed control of Berlin and the greater part of the German states, defeating the Spartan or Bolshiviki elements, who favored a radical socialistic government.

Jan. 15—According to a statement published at Ottawa, the disbursements for munitions in Canada were more than $1,000,000,000, contracts were executed for 360,000 tons of shipping, more than 55 per cent of the total British output of 18 pounder shrapnel shells came from Canada, and 350,000 war workers were employed. Military medals were awarded to 6,549 Canadians and more than 30 received Victoria crosses.

Jan. 16—The revised list of American casualties placed the total at 281,309, including 38,693 killed and 2,163 imprisoned. This is exclusive of the deaths from disease and other causes at hospitals and cantonments in the United States.

Famous Peace Treaties of Modern Times.

Cambrai, the "Ladies' Peace," between France and Austria, signed by Louise of Savoy and Margaret of Austria	1529
The Pyrenees, between Spain and France	1659
Olivia, between Germany, Sweden, Poland, Brandenburg and France	1660
Copenhagen, between Sweden and Denmark	1660
Westminster, between England and Holland	1674
Nimeguen, between England, France, Germany, Holland, Spain and Sweden	1678
The Hague, between France and Holland	1684
Ryswick, between England and France	1697
Baden, between Germany and France	1714
Aix-la-Chapelle, between England, France, Germany, Spain, Sardinia, Holland, Modena and Genoa	1748
St. Petersburg, between Russia and Prussia	1762
Versailles, between Great Britain and Spain	1783
Paris, between Great Britain and the United States	1783
Paris, between Great Britain and Holland	1784
The Hague, between France and Holland	1795
Basle, between France and Spain	1795
Tilsit, between France and Russia	1807
Valencay, between France and Spain	1813
Trent, between Great Britain and the United States	1814
Paris, between France and the Allies	1815
Adrianople, between Russia and Turkey	1829
Paris, between Russia and the Allies	1856
Prague, between Austria and Italy	1868
Versailles, between Germany and France	1871
San Stefano, between Russia and Turkey	1878
Shimonoseki, between Japan and China	1895
Paris, between the United States and Spain (ratified by the Senate in April, 1899)	1898
Portsmouth, between Russia and Japan	1905
Lausanne, between Italy and Turkey	1913
Bucharest, between Bulgaria and the Balkan Allies	1913

The treaty of Belgrade, between Turkey and the German empire, in 1739 stipulated that peace was limited to 27 years. The treaty of Adrianople in 1713, between Russia and Turkey, limited peace to 25 years.

Fourteen Principles of Peace.

At a joint session of Congress, on January 8, 1918, President Wilson placed before that body the war aims of the United States and declared that all the peoples of the world are in effect partners in this interest, and for our own part we see very clearly that unless justice be done to others it will not be done to us. The program of the world's peace, therefore, is our program, the only possible program as we see it, is this:

NO PRIVATE UNDERSTANDING.

"I. Open covenants of peace, openly arrived at, after which there shall be no private international understandings of any kind, but diplomacy shall proceed always frankly and in the public view.

FREEDOM OF THE SEAS.

"II. Absolute freedom of navigation upon the seas outside territorial waters, alike in peace and in war, except as the seas may be closed in whole or in part by international action for the enforcement of international covenants.

NO ECONOMIC BARRIERS.

"III. The removal, so far as possible, of all economic barriers and the establishment of an equality of trade conditions among all the nations consenting to the peace and associating themselves for its maintenance.

REDUCE NATIONAL ARMAMENTS.

"IV. Adequate guaranties given and taken that national armaments will be reduced to the lowest point consistent with domestic safety.

COLONIAL CLAIMS.

"V. A free, open minded and absolutely impartial adjustment of all colonial claims, based upon a strict observance of the principle that in determining all such questions of sovereignty the interests of the populations concerned must have equal weight with the equitable claims of the government whose title is to be determined.

RUSSIAN TERRITORY.

"VI. The evacuation of all Russian territory and such a settlement of all questions affecting Russia as will secure the best and freest co-operation of the other nations of the world in obtaining for her an unhampered and unembarrassed opportunity for the independent determination of her own political development and national policy, and assure her of a sincere welcome into the society of free nations under institutions of her own choosing, and, more than a welcome, assistance also of every kind that she may need and may herself desire. The treatment accorded Russia by her sister nations in the months to come will be the acid test of their good will, of their comprehension of her needs as distinguished from their own interests and of their intelligent and unselfish sympathy.

RESTORATION OF BELGIUM.

"VII. Belgium, the whole world will agree, must be evacuated and restored, without any attempt to limit the sovereignty which she enjoys in common with all other free nations. No other single act will serve as this will serve to restore confidence among the nations in the laws which they have themselves set and determined for the government of their relations with one another. Without this healing act the whole structure and validity of international law is forever impaired.

ALSACE-LORRAINE TO FRANCE.

"VIII. All French territory should be freed and the invaded portions restored and the wrong done to France by Prussia in 1871 in the matter of Alsace-Lorraine, which has unsettled the peace of the world for nearly fifty years, should be righted in order that peace may once more be made secure in the interest of all.

NEW FRONTIERS FOR ITALY.

"IX. A readjustment of the frontiers of Italy should be effected along clearly recognizable lines of nationality.

AUTONOMY IN AUSTRIA-HUNGARY.

"X. The peoples of Austria-Hungary, whose place among the nations we wish to see safeguarded and assured should be accorded the freest opportunity of autonomous development.

RUMANIA, SERBIA AND MONTENEGRO.

"XI. Rumania, Serbia and Montenegro should be evacuated; occupied territories restored; Serbia accorded free and secure access to the sea and the relations of the several Balkan states to one another determined by friendly counsel along historically established lines of allegiance and nationality; and international guaranties of the political and economic independence and territorial integrity of the several Balkan states should be entered into.

AUTONOMY IN TURKEY.

"XII. The Turkish portions of the present Ottoman Empire should be assured a secure sovereignty, but the other nationalities which are now under Turkish rule should be assured an undoubted security of life and an absolutely unmolested opportunity of autonomous development, and the Dardanelles should be permanently opened as a free passage to the ships and commerce of all nations under international guaranties.

FOR AN INDEPENDENT POLAND.

"XIII. An independent Polish state should be erected which should include the territories inhabited by indisputably Polish populations, which should be assured a free and secure access to the sea and whose political and economic independence and territorial integrity should be guaranteed by international covenant.

LEAGUE OF NATIONS.

"XIV. A general association of nations must be formed under specific covenants for the purpose of affording mutual guaranties of political independence and territorial integrity to great and small states alike."

Allies' Principal Terms of Armistice.

With Austria-Hungary, Nov. 4, 1918.

Evacuation of all territories invaded by Austria-Hungary since the beginning of the war. Withdrawal within such periods as shall be determined by the commander in chief of the allied forces on each front of the Austro-Hungarian armies behind a line fixed as follows: From Pic Umbrail to the north of the Stelvio it will follow the crest of the Rhetian Alps up to the sources of the Adige and the Eisach, passing thence by Mounts Reschen and Bremar and the heights of Oetz and Zoaller. The line thence turns south, crossing Mount Toblach and meeting the present frontier, Carric Alps. It follows this frontier up to Mount Tarvis, and after Mount Tarvis the water shed of the Julian Alps by the Col of Predil, Mount Mangart, the Tricorno (Targlou) and the water shed of the Cols di Podberdo, Podlanisoam and Idria. From this point the line turns southeast towards the Schneeberg, excludes the whole basin of the Save and its tributaries. From Schneeberg it goes down toward the coast in such a way as to include Castua, Mattuglia and Volosca in the evacuated territories.

It will also follow the administrative limits of the present province of Dalmatia, including the north Lisarica and Trivania and, to the south, territory limited by a line from the (Semigrand) of Cape Planca to the summits of the water sheds eastwards, so as to include in the evacuated area all the valleys and water courses flowing towards Serbenico, such as the Cicola, Kerka, Butisnica and their tributaries. It will also include all the islands in the north and west of Dalmatia from Premuda. Selve, Ulbo, Scherda, Maon, Paga and Puntadura in the north up to Meleda in the south, embracing Santandrea, Busi, Lisa, Lesina, Tercola, Curzola, Cazza and Lagosta, as well as the neighboring rocks and islets and passages, only excepting the islands of Great and Small Zirona, Bua, Solta and Brazza. All territory thus evacuated (shall be occupied by the forces?) of the allies and of the United States of America.

Immediate cessation of all hostilities at sea and definite information to be given as to the location and movements of all Austro-Hungarian ships.

Notification to be made to neutrals that freedom of navigation in all territorial waters is given to the naval and mercantile marine of the allied and associated powers, all questions of neutrality being waived.

With Germany, Nov. 11, 1918.

Evacuation by the German armies of the countries on the left bank of the Rhine. The countries on the left bank of the Rhine shall be administered by the local troops of occupation. The occupation of these territories will be carried out by Allied and United States garrison holding the principal crossings of the Rhine (Mainz, Koblenz, Cologne), together with the bridgeheads at these points of a thirty-kilometer radius on the right bank and by garrisons similarly holding the strategic points of the regions. A neutral zone shall be reserved on the right bank of the Rhine between the stream and a line drawn parallel to the bridgeheads and to the stream and at a distance of ten kilometers from the frontier of Holland up to the frontier of Switzerland. The evacuation by the enemy of the Rhine lands (left and right bank) shall be so ordered as to be completed within further period of sixteen days, in all thirty-one days after the signing of the armistice. All the movements of evacuation or occupation are regulated by the note (annexture number one) drawn up at the moment of the signing of the armistice.

All German troops at present in any territory which before the war belonged to Russia, Roumania, or Turkey shall withdraw within the frontiers of Germany as they existed on Aug. 1, 1914.

Evacuation by German troops to begin at once and all German instructors, prisoners, and civilian, as well as military agents, now on the territory of Russia (as defined before 1914) to be recalled.

German troops to cease at once all requisitions and seizures and any other undertaking with a view to obtaining supplies intended for Germany in Roumania and Russia (as defined on Aug. 1, 1914).

Abandonment of the treaties of Bucharest and Brest-Litovsk and of the supplementary treaties.

The allies shall have free access to the territories evacuated by the Germans on their eastern frontier, either through Danzig or by the Vistula, in order to convey supplies to the populations of those territories or for any other purpose.

Immediate cessation of all hostilities at sea and definite information to be given as to the location and movements of all German ships. Notification to be given to neutrals that freedom of navigation in all territorial waters is given to the naval and mercantile marines of the allied and associated powers, all questions of neutrality being waived.

All naval and mercantile marine prisoners of war of the allied and associated powers in German hands to be returned without reciprocity.

Surrender to the allies and the United States of America of all submarines (including submarine cruisers and mine laying submarines), with their complete armament and equipment, in ports which will be specified by the allies and the United States of America. All other submarines to be paid off and completely disarmed and placed under the supervision of the allied powers and the United States of America.

The following German surface warships, which shall be designated by the allies and the United States of America, shall forthwith be disarmed and thereafter interned in neutral ports, or, for the want of them, in allied ports to be designated by the allies and the United States of America and placed under the surveillance of the allies and the United States of America, only care-takers being left on board—namely: Six battle cruisers, ten battleships, eight light cruisers (including two mine layers), fifty destroyers of the most modern type. All other surface warships (including river craft) are to be concentrated in German naval bases to be designated by the allies and the United States of America, and are to be paid off and completely disarmed and placed under the supervision of the allies and the United States of America. All vessels of the auxiliary fleet (trawlers, motor vessels, etc.) are to be disarmed.

The Peace Treaty and Record of Events.

President Wilson, together with the other four American representatives, sailed for Europe on Dec. 24, 1918.

The peace conference at Paris, France, adopted the regulation on Jan. 19, 1919, that the minor belligerent states are to take part only in sittings at which questions concerning them are discussed and that the United States, Japan, Great Britain, Italy and France are to take part in all the meetings.

At a session of the entire peace conference it was decided by a majority vote to create a League of Nations to promote international obligations and provide safeguards against war. To this agreement the representatives of about thirty nations became signatories, subject to subsequent ratification of their respective governments.

In April, the decision was reached to make an assessment of indemnity against Germany for $23,000,000,000 in gold, one-fourth to be paid within two years, two-fifths within the subsequent thirty years, and the remainder at a time to be fixed by a joint commission.

Versailles was made the place of meeting the plenipotentiaries of Germany and her allies, where, on May 1, the German delegates presented their credentials and soon after received a copy of the peace treaty.

The colonies of Germany were turned over as mandatories to Great Britain, except the islands of the Pacific, which were transferred to Japan; a small area in German Southwest Africa was allotted to Belgium.

Germany became a republic and was deprived of a portion of her national domain, including a transfer of territory on the east to Poland and the western province of Alsace-Lorraine to France; the empire of Austria-Hungary was dismembered.

Among the new independent governments organized are Finland, Poland, Czecho-Slovakia, Jugo-Slavia and Ukrainia. Turkey was greatly reduced in territory and prestige.

Italy received South Tyrol, Trieste, the Istrian Peninsula, a part of Dalmatia, and concessions in Asia Minor. Greece received concessions in Europe and Asia Minor.

Great Britain, besides mandatories over nearly all the German colonies, received Egypt and concessions in Asia, chiefly in Mesopotamia; England also asserted her determination not to yield her naval power on the high seas.

Germany was obliged to replace the damages done to shipping by her sea forces during the war; to aid in accomplishing this she must build not less than 200,000 tons of shipping annually for five years. Other obligations imposed upon Germany include that the fortifications at Helgoland are to be destroyed, her army of defense must not be over 100,000 men, those responsible for the war are to be punished, and property destroyed or acquired during the war must be replaced, such as ship, machinery, live-stock, railway cars, works of art, etc.

The monarchy of Russia was destroyed and in its place was organized a semi-socialist republic, but the territory was greatly lessened by minor cessions and the establishments of independent governments in Finland, Poland and Ukrainia; Roumania acquired territory from Russia and Austria-Hungary.

Kiau-chau, the German concession in China, was at first tacitly transferred to Japan, but this matter, owing to protests from China and many Americans, was deferred for final adjustment later.

The peace congress declined to take up the question of independence in Ireland, where a republic had been declared under the leadership of President Eamonn de Valera.

Many questions, such as the exact status of Servia, Montenegro, Bulgaria, Hungary, German Austria, Constantinople and the larger parts of Russia, continued to be subjects for discussion throughout the year after the war ended.

Europe Made Over

ALSACE-LORRAINE—The German name is Elsass-Lothringen. It was a part of the older German empire, and in 1648 was ceded to France by the Peace of Westphalia. It was ceded by France to Germany in 1871, as the result of the Franco-Prussian War. Area, 5,605 square miles; population, 1,874,014. Alsace-Lorraine is restored to France with frontiers as before 1871. The capital is Strassburg, population 178,891.

ARMENIA—Partly in Russia, in Persia, and mostly in Turkey, has been invaded in turn by Romans, Persians, Arabs, Turks, and Russians. Throughout the many massacres, persecutions and savage invasions Armenia persists in existing. The United States is the proposed mandatory for Armenia. With outlets on the three great bodies of water, the Mediterranean Sea, the Black Sea, and the Caspian Sea, and its proximity to the Tigris and Euphrates, and thence to the Persian Gulf and Indian Ocean, resurrected Armenia will become one of the great depots to the Near East. The proposed Armenian state is composed of approximately 208,000 square miles, and about 10,800,000 inhabitants, apportioned as follows: Area, in square miles: 57,000 Russian and 151,000 Turkish. Population: 4,700,000 Russian and 6,100,000 Turkish.

AUSTRIA-HUNGARY—Formerly a monarchy, consisting of two states, the Austrian Empire and the Hungarian Kingdom. Before the Great War its area and population was as follows:

	Area square miles	Population
Austria	115,882	28,571,934
Hungary	125,609	20,744,744
Austria-Hungary	241,491	49,316,678
Bosnia and Herzegovina	19,768	1,898,044
Total	261,259	51,214,722

An estimate of the different ethnical elements in the Dual Monarchy, based on the census of 1910, shows their distribution as follows:

Germans	11,987,701
Magyars	10,061,549
Czechs	8,403,953
Poles	4,967,984
Ruthenians	3,991,711
Serbians	3,722,967
Rumanians	3,224,147
Jews	2,246,458
Slovenes	1,252,940
Italians	768,422

Austria-Hungary has been partitioned as follows:

	Area square miles	Population
Czecho-Slovakia	52,712	13,600,000
Austria	33,438	7,076,418
Hungary	95,000	15,500,000
Italia Irredenta, etc.	11,740	1,848,542
Jugo-Slavia	68,369	13,190,767
Total	261,259	51,215,727

AUSTRIA—On Oct. 23, 1918, the German Austrian deputies in the Austrian reichsrath formed an assembly for the purpose of conducting the affairs of the Germanic people in Austria. Karl Seitz was elected president of the new assembly. Approximate area, 33,438 square miles; population 7,076,418.

BAVARIA—A kingdom of Germany; late in 1918 was proclaimed a republic with Herr Hoffmann as the Premier. Under Soviet rule for a short period early in 1919. The present capital is located at Bamberg. Area, 30,346 square miles, population, 6,887,291. Ex-King Louis, or Ludwig III, is in exile in Switzerland.

BELGIUM—The Peace Treaty added 382 square miles to Belgium in the contested territory of Moresnet, and the circles of Eupen and Malmedy, located between Holland and Luxemburg in Germany.

CZECHO-SLOVAKIA — Proclaimed a republic Nov. 15, 1918, with Dr. Thos. G. Masaryk as the first president. The area of the new republic is approximately 52,712 square miles, or about four times greater than that of Belgium. Population, about 13,600,000; 10,000,000 of these are Bohemians and Slovaks. It consists of Bohemia, Moravia, Austrian Silesia, and upper part of Hungary.

DALMATIAN COAST—See under Italy.

DENMARK—Schleswig (or Slesvig, as the Danes spell it), was taken from Denmark by Germany in 1864. The treaty of 1864 provided for a plebiscite in Schleswig to decide the inhabitants' preference. Germany never carried out this provision. The peace treaty of Paris provides for this plebiscite to be taken in two zones.

FINLAND—Sweden conquered Finland in 1157, and occupied it until the thirteenth century; Russia acquired a small part of it in 1721, and the whole in 1809. Proclaimed its independence July 20, 1917. and on October 7 a republic was

formed with Prof. K. J. Stahlberg as the president. Its area is 125,689 square miles, and the population amounts to 3,277,100.

FRANCE—The addition of Alsace-Lorraine to France will change its area from 207,054 square miles, and 39,602,258 population before the war, to 212,659 square miles, and 41,476,272 population.

If the Saar Basin is added to the above, it will total as follows: Area 213,397 square miles, and 41,705,790 population.

GERMANY—Formerly an empire, composed of 26 states, with a total area of 208,780 square miles, and a population of 64,925,993 in 1910. Estimated population June 30, 1914, 67,812,000.

By the terms of the treaty, through cession, loss of sovereignty, and by plebiscite, Germany loses in area and population as follows:

	Area, Sq. M.	Population
Alsace-Lorraine, ceded to France	5,605	1,874,014
Moresnet, Eupen, Malmedy, etc., ceded to Belgium	382	118,573
*Upper Silesia, Posen, and West Prussia, ceded to Poland	27,686	5,903,305
Northeast Prussia and Memel, loses sovereignty	40	6,000
Danzig Area, loses sovereignty	729	109,350
Saar Basin, loses sovereignty	738	229,518
Allenstein Area, by Plebiscite	5,785	833,040
Schleswig, by Plebiscite	2,787	615,927
Total	43,752	9,689,727
Before the War	208,780	67,812,000
Deductions by Provision of Treaty	43,752	9,689,727
Remaining to Germany	165,028	58,122,273

Germany's colonies and dependencies in Africa, Asia, and in the Pacific Ocean were: Estimated area, 1,027,820 square miles; 24,389 white population, and an estimated native population of 12,041,603.

Disposition of Former German Colonies—Togoland and Kamerun—France and Great Britain shall make a joint recommendation to the League of Nations as to their future.

German East Africa—The mandate shall be held by Great Britain.

German Southwest Africa—The mandate shall be held by the Union of South Africa.

The German Samoan Islands—The mandate shall be held by New Zealand.

The other German Pacific possessions south of the equator, excluding the German Samoan Islands and Nauru, the mandate shall be held by Australia.

Nauru (Pleasant Island)—The mandate shall be given to the British Empire.

German Pacific islands north of equator—The mandate shall be held by Japan.

GREECE—About the middle of May, 1919, Greece, with the aid of the allies, established her mandatory over Smyrna, Turkey, and Italy agreed to turn over the Dodecanese islands to her. Greece demanded the territory of Northern Epirus and Thrace, and to have the Dardanelles placed under International control.

HUNGARY—The Hungarian People's Republic was proclaimed Nov. 16, 1918, by the Hungarian National Council and the two chambers of parliament. Area, about 95,000 square miles; population, about 15,500,000. Count Michael Karolyi was elected President, but was overthrown in April, 1919, by Bela Kun, who in turn was overthrown.

ITALY AND ITALIA IRREDENTA—"Italia Irredenta" means "unredeemed Italy." After 1861, when the present kingdom of Italy was established, the papal states, Venetia, the district around Trieste, and the district around Trent were still—although inhabited mainly or in part by Italians—not parts of the kingdom. Venetia and the papal states were annexed in 1866 and 1870. This process of winning Italy from foreign control came to be called redeeming Italy, and after 1870 the term "Italia Irredenta" was applied to Trieste and the Trentino, these being territories still "unredeemed." This is Italy's claim against Austria-Hungary, together with parts of the Dalmatian coast and islands, which amounts to approximately 11,740 square miles and has a population of about 1,848,542. Italy also seeks the possession of Avlona and its hinterland, a protectorate over Albania, possession of the islands (Dodecanesia), in the Ægean sea, which were taken away from Turkey in the Tripolitan war, and the province of Adalia, if France and Great Britain should occupy territory in Asia Minor.

JUGO-SLAVIA—"Kingdom of the Serbs, Croats and Slovenes." On Oct. 31, 1918, the Croatian parliament at Agram voted for a total separation of Croatia, Slavonia and Dalmatia from Hungary. A regent was appointed Nov. 26, 1918, by the National Council. Jugo-Slavia is composed of parts of Austria-Hungary, viz.: Croatia and Slavonia, part of Styria, part of Dalmatia, Bosnia and Herzegovina, Montenegro, the greater part of Serbia, and a part of Albania. The area is approximately 87,490 square miles, and the population estimated from 15,000,000 to 18,000,000.

LUXEMBURG—According to the "Second Treaty of Versailles," Germany renounces her various treaties and conventions with Luxemburg from Jan. 1, last.

POLAND—Was known as a duchy in 962-992, after which it declined, but became prosperous again in 1333-70. The kingdom flourished from 1370-1763, when it suffered greatly from factional troubles. Poland was partitioned three times; in 1772, in 1793, and in 1795. The Congress of Vienna created it into a kingdom again in 1815, in Western Russia. The kingdom of

* Upper Silesia to be decided by Plebiscite.

Poland ceased to exist, after an unsuccessful revolt in 1863, which was crushed by Russia in 1864. Poland originally consisted of Russian Poland, Austrian Poland (Galicia), and Prussian Poland. On Nov. 9, 1918, it was announced that a Polish republic had been formed at Cracow, under the presidency of Deputy Daszynski, while on Nov. 15, it was reported that Gen. Jos. Pilsudski had been intrusted with the formation of a national government. Ignace Jan Paderewski became the Premier.

The area of Russian Poland is 43,804 square miles, with a population of 12,247,600. Austrian Poland (Galicia), area 30,321 square miles, population 8,211,770. Prussian Poland (Posen, Upper Silesia, and West Prussia), area 27,686 square miles, population 5,903,305; total area about 101,811 square miles, and about 28,803,305 inhabitants.

RHINELAND—That part of Germany north of Alsace-Lorraine and west of the Rhine River. Occupied by troops of the Allies since the Armistice of Nov. 11, 1918, went into effect.

RUMANIA—Rumanians overran Hungary as far west as the Theiss River. Rumania desires to retain possession of that portion of Russian Bessarabia given her by the Central Powers under the cancelled treaty of Bucharest, and now in her possession. Also Southern Dobrudja, as ceded to her by Bulgaria after the second Balkan war; both of these possessions command the mouth of the Danube. Rumania wants to annex the Hapsburg provinces of Bukowina and Transylvania, and a considerable part of the rich agricultural district of Banat. Here the Rumanian aspirations conflict with Serbia, which claims a large section of Banat as well as other sections of former Austria-Hungary.

RUSSIA—At present there are twenty-one separate state formations in Russia:

1. Azerbaijan. Formed out of part of the Caucasus.

2. Bessarabia. One of the provinces of Old Russia, with Kishinev as its capital. Area 17,143 square miles, population 2,686,600. Was declared an independent Moldavian republic Dec. 23, 1917. On April 9, 1918, the government agreed that Bessarabia should be joined to Rumania. The Ukrainian People's Republic refused to recognize the union with Rumania. The Bolshevik government of Russia also protested against the union. The affairs of Bessarabia are at present in an unsettled and uncertain condition.

3. Caucasus. Proclaimed a republic Sept. 20, 1917, and declared its complete independence on April 22, 1918.

4. Courland. One of the provinces of Old Russia, with an area of 10,435 square miles, and a population of 812,300. On March 15, 1918, Germany recognized the restored Duchy of Courland, which it took under its protection, but which was abrogated by the new Treaty of Paris.

5. Don Republic. Was proclaimed a republic in January, 1918.

6. Daghestan. Formed out of part of the Caucasus.

7. Esthonia. One of the provinces of Old Russia, with an area of 7,605 square miles and 512,500 inhabitants. On April 22, 1918, requested the German government to create a State to be joined to Germany through personal union with the king of Prussia. Union abrogated by the new Treaty of Paris.

8. Finland. See after Denmark.

9. Georgia. Was proclaimed a republic in January, 1918.

10. Kazan. Was proclaimed a republic in 1918. One of the provinces of Old Russia, with an area of 24,587 square miles and 2,900,400 inhabitants.

11. Latvia. Formed out of parts of Lithuania and the old district of Livonia.

12. Lithuania. Proclaimed a republic Nov. 30, 1918, at Riga. Area is approximately 80,000 square miles, and the population about 9,000,000. Vilna is the capital.

13. Livonia. One of the provinces of Old Russia; area 17,574 square miles, population 1,778,500. Uncertain when independence was declared.

14. Poland. See after Luxemburg.

15. Siberia. Consisted of 10 governments of Old Russia in Asia, extending from the boundary of Europe to the Pacific Ocean. Area 3,301,629 square miles, population 10,045,300. Was proclaimed a republic in December, 1917, with its capital at Tomsk.

16. Tartar Bashkir. This republic is in the territory of the Southern Ural and the Central Zavolzhe.

17. Tauride. Was proclaimed a republic March, 1918. Consists of the province of Taurida, of Old Russia, with an area of 23,312 square miles, and a population of 2,133,300.

18. Turkestan. Proclaimed a republic Jan., 1918. Is located in Asia, and has an area of 420,807 square miles, with 6,684,400 inhabitants.

19. Ukraine. The Ukrainian People's Republic was proclaimed on Nov. 21, 1917. It claims the three districts of Little Russia, Southwestern Russia, and New Russia; area is 216,400 square miles, and population about 30,000,000. Kiev is the capital.

20. White Russia. Independence proclamation uncertain. It includes the governments of Vilna, Grodno, Moghilev, Minsk, Smolensk, and Vitebsk. Formerly it belonged to Poland.

21. Yakutsk. Proclaimed an independent republic in May, 1918. Is a province in the northeastern part of Siberia, Asiatic Russia. Area 1,530,253 square miles, population 332,600.

SCHLESWIG.—See under Denmark.

TURKEY—The Ottoman Empire was made up of Turkey in Asia, Turkey in Europe, and certain islands in the Mediterranean. Since the conclusion of the First Balkan War, Nov., 1913, which commenced in Oct., 1912, the Turkish possessions in Europe have been considerably lessened, Turkey in Europe being divided among Bulgaria, Serbia, Montenegro, Albania, and Greece. The Ægean Islands are in possession of Greece and Italy, the definite arrangement with regard to their destiny being in the hands of the Five Great Powers, in the making of the Treaty of Peace.

The total area of Turkey's dominions were estimated at about 710,224 square miles, and its total population at about 21,273,900.

It is proposed to divide the whole of Asia Minor among the Allies. President Wilson will urge America to accept a mandate over Constantinople and Armenia, but not over Anatolia, leaving that as the remnant of the old Turkish Empire. Smyrna and its vicinity will probably go to Greece. A strip of coast northeast of Rhodes to go to Italy. Syria, to be independent under a French protectorate. Mesopotamia, over which the British will have a mandate. Palestine, to be independent, possibly under a British protectorate, with consent of League of Nations.

Aden. Was captured by the British in 1839, and annexed. It is an important coaling station, and a port of call for steamships. Area of Aden peninsula, 75 square miles, with the Protectorate, about 9,000 square miles. Population 46,165.

Asir, Principate of. On the west coast of Arabia between Yemen and Hejaz, and its capital is Sabiyah.

El Haza. See under Nejd.

Hejaz, Kingdom of. Attained its independence during the war, and is the most important principality in Arabia by virtue of its possession of Mecca and Medina, the Holy Places of Islam. Early in the war the British Government guaranteed their protection of the Holy Places, and on June 5, 1916, the Emir Husein ibn Ali proclaimed his independence; area 96,500 square miles, population 300,000.

Jebel Shammar, Emirate of. Formerly within the jurisdiction of Nejd. Capital at Hail.

Koweit, Sultanate of. On the northwestern coast of the Persian Gulf, acquired considerable importance during the discussion of the Bagdad Railway. The Sultan is subsidized by the British Government.

Nejd, Emirate of, and El Haza. Has its capital at Riyadh. The present Emir expelled the Turks in 1913, and has extended his influence to include Hofuf in the region of the Persian Gulf.

Oman, Sultanate of. Extends along the southern shore of the gulf of Oman from the entrance into the Persian Gulf to extreme eastern point of Arabia, and thence southwest as far as Ras Sajir. Area, 82,000 square miles; population estimated at 500,000. Capital, Maskat. The integrity of the State has been guaranteed by Great Britain and Frence.

Yemen, Imamate of. In the southwestern point of Arabia, with its capital at Sana. Area, 73,800 square miles; population, 750,000.

UKRAINE—See under Russia.

The Love of Country.

Breathes there a man with soul so dead,
Who never to himself hath said,
  This is my own, my native land?
Whose heart hath ne'er within him burned,
As home his footsteps he hath turned
  From wandering on a foreign strand?

If such there breathe, go, mark him well!
For him no minstrel raptures swell;
High though his titles, proud his name,
Boundless his wealth as wish can claim,—
Despite those titles, power, and pelf,
The wretch, concentered all in self,
Living, shall forfeit fair renown,
And, doubly dying, shall go down
To the vile dust, from whence he sprung,
Unwept, unhonored, and unsung.

—*Sir Walter Scott.*

Summary of the

Treaty of Peace with Germany

"Second Peace of Versailles"

The preamble names as parties of the one part the United States, the British Empire, France, Italy, and Japan, who with Belgium, Poland, and twenty other smaller powers are described as the allied and associated powers, and on the other part Germany.

On the request of the imperial government an armistice was granted on Nov. 11, 1918, by the allies, in order that a treaty of peace might be concluded, and that the war should be replaced by a firm, just, and durable peace, the plenipotentiaries agreed as follows:

"From the coming into force of the present treaty, the state of war will terminate, and official relations with Germany will be resumed by the allies."

PART I—The covenant of the League of Nations constitutes part 1 of the peace treaty, which places upon the league many specific and general duties. Members will be the signatories of the covenant and others who declare accession without reservation within two months. A new state may be admitted by vote of two-thirds of the assembly. A state may withdraw upon giving two years' notice.

Assembly—Will consist of representatives of the members, and will meet at stated intervals. Each member will have one vote, and not more than three representatives.

Council—Will consist of representatives of the five great allied powers, with representatives of members selected by the assembly, and will meet at least once a year. Each state will have one vote and not more than one representative.

Secretariat—A permanent secretariat will be established at the Seat of the League, Geneva.

Armaments—The council will formulate plans for a reduction of armaments, to be revised every ten years.

Preventing of War—Members are pledged to submit disputes to arbitration, and not to resort to war until three months after the award. The council will establish a permanent court of international justice to determine disputes or to give advisory opinions.

Members resorting to war in disregard of the covenant will be immediately debarred from all intercourse with other members. The council will consider what action can be taken by the league for the protection of the covenants.

Validity of Treaties—All treaties concluded after the institution of the league will be registered with the secretariat and published.

Monroe Doctrine—The covenant abrogates all obligations between members inconsistent with its terms, but nothing in it shall affect the validity of international engagement, such as treaties of arbitration or regional understandings, like the *Monroe Doctrine,* for securing the maintenance of peace.

The Mandatory System—The tutelage of nations not yet able to stand by themselves will be intrusted to advanced nations who are best fitted to undertake it.

World Labor—The league members will endeavor to secure and maintain fair conditions of labor for men, women, and children in their own countries and other countries, and just treatment of the native inhabitants of territories under their control.

Annex—Original Members of the League of Nations Signatories of the Treaty of Peace and States invited to accede to the Covenant.

PART II—*Boundaries of Germany*—From the frontiers of Belgium, Holland, and Germany, south to neutral Moresnet, east line of Eupen, northeast and east line of Malmedy to Luxemburg; north and east line of Saar Basin; north and east line of Alsace-Lorraine; present Switzerland frontier; Austria frontier of Aug. 3, 1914; Czecho-Slovakia frontier, or old frontier between Germany and Austria, to near Neustadt; thence north, west, northwest and north-northeast to the Baltic Sea, near Leba.

PART III—*Belgium*—Germany is to consent to the abrogation of the treaties of 1839, by which Belgium was established as a neutral state, and to agree to any convention with which the allies may determine to replace them; to recognize the full sovereignty of Belgium over the contested territory of Moresnet, the circles of Eupen and Malmedy, the inhabitants of which, within six months, to protest against this change of sovereignty, the final decision to be reserved to the League of Nations.

Luxemburg—Germany renounces her various treaties and conventions with Luxemburg from Jan. 1, last.

Left Bank of the Rhine—Germany is forbidden to maintain or construct any fortifications or to maintain armed forces less than fifty kilometers to the east of the Rhine.

Saar Basin—As compensation for the destruction of coal mines in northern France, and as payment on account of reparation, Germany cedes to France full ownership of the coal

mines of the Saar basin with their subsidiaries, accessories and facilities. The territory will be governed by a commission.

After fifteen years a plebiscite will be held to ascertain the desires of the population as to continuance under the League of Nations, union with France, or union with Germany; all inhabitants over 20 years resident therein will have the right to vote.

Alsace-Lorraine—The teritories ceded to Germany by the treaty of Frankfort are restored to France, with their frontiers as before 1871, to date from the signing of the armistice, and to be free of all public debts. All public and private property of German ex-sovereigns passes to France without payment or credit, as well as ownership of railroads and rights over concessions of tramways. The Rhine bridges pass to France with the obligation for their upkeep.

Austria—Germany recognizes the independence of Austria.

Czecho-Slovakia—Germany recognizes the complete independence of the Czecho-Slovak state, including the autonomous territory of the Ruthenians south of the Carpathians.

Germany renounces in favor of the Czecho-Slovak state all Silesian territory in the Kreis of Ratibor, to the south of Katscher and west of Kranowitz. Germany renounces in favor of the Czecho-Slovak state the Kreis of Leobschutz south and southeast of Leobschutz, in case the plebiscite decides for Germany instead of for Poland.

Poland—Germany cedes to Poland Posen, and the province of West Prussia on the left bank of the Vistula. A plebiscite will be held in Upper Silesia to decide whether the inhabitants wish to be attached to Germany or Poland.

East Prussia—The southern and eastern frontier is to be fixed by plebiscite, the first in the regency of Allenstein, and the second in the circles of Stuhm and Rosenburg and the parts of the circles of Marienburg and Marienwerder.

Poland, Germany, and Danzig will assure suitable railroad communication across German territory on the right bank of the Vistula between Poland and Danzig, and Poland shall grant free passage from East Prussia to Germany.

Memel—The northeastern corner of Prussia, about Memel, is to be ceded by Germany to the allies.

Free City of Danzig—Danzig and the district about it is to be constituted into the "free city of Danzig."

Schleswig—The frontier between Germany and Denmark will be fixed by the self-determination of the population. The region north of the line from Flensburg Fohrde, southwestward and westward to the North Sea, south of the islands of Fohr and Amrum, will be administered by a commission of seven; the population will vote in two zones, after which a new frontier will be drawn and Germany will renounce all sovereignty over Schleswig.

Helgoland—The islands of Helgoland and Dune shall have all fortifications and harbors destroyed.

Russia and Russian States—Germany agrees to abrogate the Brest-Litovsk and other treaties, to recognize all treaties entered into by the allies with states which were a part of the former Russian empire.

PART IV—Outside Europe, Germany renounces all rights, titles, and privileges as to her own or her allies' territories to the allies, and accepts whatever measures are taken by the allies in relation thereto.

German Colonies—Germany renounces in favor of the allies her colonies and overseas possessions.

China—Germany renounces in favor of China all privileges and indemnities resulting from the Boxer protocol of 1901, except Kiau-Chau, and agrees to return to China, all the astronomical instruments seized in 1901. Germany accepts the abrogation of concessions at Hankow and Tientsin, China agreeing to open them to international use. She renounces in favor of Great Britain her property at Canton, and of France and China jointly, the German school at Shanghai.

Siam—Germany abrogates all agreements with Siam made before July 22, 1917.

Liberia—Germany renounces all rights under the international arrangements of 1911 and 1912 regarding Liberia.

Morocco—Germany renounces all her rights, titles, and privileges under the act of Algeciras and the Franco-German agreements of 1909 and 1911.

Egypt—Germany recognizes the British protectorate over Egypt, and renounces the capitulation, and all the treaties concluded by her with Egypt; consents also to the transfer to Great Britain of free navigation of the Suez Canal.

Turkey and Bulgaria—Germany accepts all arrangements which the allies make with Turkey and Bulgaria.

Shantung—Germany renounces in favor of Japan all rights, titles, and privileges, notably as to Kiau-Chau and the railroads, mines, and cables acquired by her treaty with China of March 6, 1897, and of all other agreements as to Shantung Province.

PART V—*Military Forces*—Within 3 months of the peace the number of effectives must be reduced to 200,000. The demobilization of the German army must take place not later than March 31, 1920. Its strength may not exceed 100,000, including 4,000 officers, with not over seven divisions of infantry, and three of cavalry, to be devoted exclusively to maintenance of internal order and control of frontiers. Divisions may not be grouped under more than two army corps headquarters staffs.

Armaments—All establishments for manufacturing or storage of arms and munitions of war must be closed within three months of the peace. The manufacture or importation of all kinds of gases and all analogous liquids is forbidden. Germany may not manufacture such materials for foreign governments.

Conscription—Conscription is abolished in Germany. The enlisted personnel must be maintained by voluntary enlistments for terms of twelve consecutive years. Officers remaining in the service must agree to serve to the age of 45 years, and newly appointed officers must agree to serve actively for twenty-five years.

Fortresses—All forts and field works situated in German territory within a zone fifty kilometers east of the Rhine will be dismantled within three months. The fortified works on the southern and eastern frontiers may remain.

Naval—The German navy must be demobilized within a period of two months after the peace. She will be allowed six small battleships, six light cruisers, twelve destroyers, twelve torpedo boats, and no submarines, either military or commercial, with a personnel of 15,000 men, including officers, and no reserve force of any character.

Only voluntary service is permitted, with a minimum period of twenty-five years service for officers and twelve for men. Mercantile marines will not be permitted any naval training.

All German vessels of war in foreign ports will be surrendered, the final disposition to be decided upon by the allies; all war vessels under construction, including submarines, must be broken up. The largest armored ship Germany will be permitted will be 10,000 tons. She is required to sweep up the mines in the North and Baltic seas. All Baltic fortifications must be demolished; other coast defenses are permitted, but guns must not be increased.

Only commercial wireless messages may be sent during three months after the peace.

Aircraft—One hundred unarmed seaplanes are to be retained till Oct. 1, to search for submarine mines. No dirigible shall be kept. The entire air personnel is to be demobilized within two months, except for 1,000 officers and men retained till Oct. 1. The manufacture of aircraft or parts is forbidden for six months.

Control—Interallied Commissions of control will see to the execution of the provisions; they may establish headquarters at the German seat of government and go to any part of Germany. She must give them complete facilities, pay their expenses, and also the expenses of execution of the treaty.

PART VI—*Prisoners of War*—The repatriation of German prisoners and interned civilians is to be carried out at Germany's expense by a mixed commission; Germany is to restore all property belonging to allied prisoners. There is to be a reciprocal exchange of information as to dead prisoners and their graves.

Graves—Both parties will respect and maintain the graves of soldiers and sailors buried on their territories.

PART VII—*Penalties*—The allies publicly arraign William II of Hohenzollern, formerly German emperor, for a supreme offense against international morality and the sanctity of treaties.

The ex-emperor's surrender is to be requested of Holland, and a special tribunal set up composed of one judge from each of the five great powers, which will fix the punishment it considers should be imposed.

PART VIII—*Reparation*—The allies affirm and Germany accepts the responsibility of herself and her allies for causing all the loss and damage to which the allies have been subjected as a consequence of the war imposed upon them by the aggression of Germany and her allies. The allies require her to make compensation for all damages caused to civilians.

Germany further binds herself to repay all sums borrowed by Belgium from her allies up to Nov. 11, 1918, handing over to the reparation commission 5 per cent gold bonds falling due in 1926. The total obligations of Germany to pay is to be determined and notified to her not later than May 1, 1921, by an interallied commission, and a schedule of payments to discharge the obligation within thirty years shall be presented.

Germany shall pay within two years $5,000,000,000 with the understanding that certain expenses, such as those of the armies of occupation and payments for food and raw materials, may be deducted at the discretion of the allies.

Bond issues are to be required of Germany in acknowledgment of its debt as follows: $5,000,000,000 payable not later than May 1, 1921, without interest; $10,000,000,000, bearing 2½ per cent interest between 1921 and 1926, and thereafter 5 per cent, with a 1 per cent sinking fund payment beginning in 1926, and an additional amount of $10,000,000,000, bearing interest at 5 per cent.

Shipping—Germany agrees to cede all merchant ships of 1,600 tons gross and upward; one-half of her ships between 1,000 and 1,600 tons gross, one-quarter of her steam trawlers and one-quarter other fishing boats, to be delivered within two months to the reparation commission, and further agrees to build merchant ships not exceeding 200,000 tons gross annually during the next five years.

All ships used for inland navigation taken by Germany from the allies are to be restored within two months.

Devastated Areas—Germany undertakes to devote her economic resources directly to the physical restoration of the invaded areas.

Coal, etc.—Germany is to deliver specified amounts of annual production to France, Bel-

gium, and to Italy at prices to be fixed as prescribed in the treaty. Provision is also made for delivery to France annually for three years 35,000 tons of benzol, 50,000 tons of coal tar, and 30,000 tons of sulphate of ammonia.

Dyestuffs—Germany is to give option on dyestuffs and chemical drugs and quinine, at prices fixed by the reparation commission.

Cables—Germany renounces all title to specified cables, which will be credited to her against reparation indebtedness.

Special Provisions—Germany is to furnish to the University of Louvain manuscripts, early printed books, maps, etc., to be equivalent to those destroyed of the Library of Louvain. In addition, Germany is to deliver to Belgium other noted works of art.

Germany is to restore within six months the Koran of the Caliph Othman, formerly at Medina, to the king of Hejaz, and the skull of the Sultan Mkwawa, formerly in German East Africa, to his Britannic majesty's government.

PART IX—*Finance*—Powers to which German territory is ceded will assume a certain portion of the German pre-war debt. In view, however, of the special circumstances under which Alsace-Lorraine was separated from France in 1871, when Germany refused to accept any part of the French public debt. France will not assume any part of Germany's pre-war debt there, nor will Poland share in certain German debts incurred for the oppression of Poland.

Mandatory powers will not assume any German debts or give any credit for German government property.

Germany is required to pay cost of armies of occupation, this cost to be a first charge on her resources. The cost of reparation is the next charge. She is to deliver all sums deposited in Germany by Turkey and Austria-Hungary, and to transfer to the allies all claims against Austria-Hungary, Bulgaria, or Turkey in connection with agreements made during the war.

Germany confirms the renunciation of the treaties of Bucharest and Brest-Litovsk.

Germany agrees to reimburse all sums for the sale of coffee belonging to the State of Sao Paulo, Brazil, in the various German ports, and Antwerp and Trieste.

PART X—*Economic Clauses—Customs*—For six months Germany shall impose no tariff duties higher than the lowest in force in 1914, and for specified products or articles this restriction obtains for two and a half years, or for five years unless further extended by the League of Nations.

Shipping—Ships of the allies shall enjoy the same rights in German ports as German vessels.

Unfair Competition—Germany is to give the trade of the allies adequate safeguards against unfair competition.

Treatment of Nationals—Germany shall impose no exceptional taxes or restriction upon the nationals of the allies. Germany agrees to recognize any new nationality acquired by her nationals under the laws of the allies, all consuls and other officials appointed by the allies, and to admit them to exercise their duties with usual rules and customs.

Treaties—Forty multilateral conventions are renewed between Germany and the allies, with several exceptions.

Great Britain and the United States, as to article 3 of the Samoan treaty of 1899, are relieved of all obligation toward Germany.

Each state of the allies may renew any treaty with Germany consistent with the peace treaty by giving notice within six months. Treaties entered into by Germany since Aug. 1, 1914, with other enemy states are annulled.

Opium—The contracting powers agree to bring the opium convention of Jan. 23, 1912, into force by enacting within twelve months of the peace the necessary legislation.

Pre-War and War Debts—A system of clearing offices is to be created within three months, one in Germany and one in each allied state, for the payment of pre-war debts, and for the adjustment of the proceeds of the liquidation of enemy property and other obligation.

Property, Rights and Interests—Germany shall restore or pay for all private enemy property damaged by her, the damages to be fixed by the mixed arbitral tribunal. The allies may liquidate German private property within their territories as compensation for property of their nationals not restored or paid for by Germany, for debts, and for other claims against Germany.

Contracts, Prescriptions, Judgments—Pre-war contracts between allied nationals excepting the United States, Japan and Brazil, and German nationals are cancelled. Mixed arbitral tribunals shall have jurisdiction over all disputes as to contracts concluded before the present peace treaty.

Fire insurance contracts are not considered dissolved by the war, but lapse at the date of the first annual premium falling due three months after the peace.

Life insurance contracts may be restored by payments of accumulated premiums with interest, sums falling due on such contracts during the war to be recoverable with interest. Marine insurance contracts are dissolved by the outbreak of war.

Any allied power, however, may cancel all the contracts running between its nationals and a German life insurance company.

Mixed Arbitral Tribunal—Shall be established to decide matters within their jurisdiction relating to contracts and other questions.

Industrial Property—Rights as to industrial, literary, and artistic property are re-established,

the special war measures of the allies are ratified, and the right reserved to impose conditions on the use of German patents and copyrights when in the public interest. Pre-war licenses and rights to sue for infringements committed during the war are cancelled, except as between the United States and Germany.

PART XI—*Aerial Navigation*—Aircraft of the allies shall have liberty of passage over and landing in Germany.

PART XII—*Ports, Waterways and Railways—Freedom of Transit*—Germany must grant free transit through her territories by rail or water to persons, goods, ships, carriages, and mails from or to any of the allied powers, without customs or transit duties, undue delays, restrictions or discriminations based on nationality, means of transport, or place of entry or departure.

Navigation—Freedom of navigation shall be accorded nationals of any of the allies, on inland navigation routes of Germany.

Free Zones in Ports—Free zones existing in German ports on Aug. 1, 1914, shall be maintained.

Germany must cede to the allies certain tugs, vessels, and facilities for navigation on all following rivers.

International Rivers—The Elbe, the Voltava, the Oder, the Niemen, and the Danube are declared international, together with their connections.

The Danube—The European Danube commission reassumes its pre-war powers with representatives of only Great Britain, France, Italy, and Rumania. The upper Danube is to be administered by a new international commission.

Rhine and Moselle—The Rhine is placed under the central commission. Germany must give France all rights to take water to feed canals on the course of the Rhine between the two extreme points of her frontier.

Belgium is to be permitted to build a deep draft Rhine-Meuse canal within twenty-five years.

Czecho-Slovakia—Germany shall lease for 99 years to Czecho-Slovakia free zones in the ports of Hamburg and Stettin.

Railways—Germany agrees to co-operate in the establishment of through ticket services for passengers and baggage; to ensure communication by rail between the allied and other states; to allow construction or improvement of such lines as are necessary.

The Kiel Canal—Is to remain free and open to war and merchant ships of all nations at peace with Germany.

PART XIII—*Labor*—Members of the League of Nations agree to establish a permanent organization to promote international adjustment of labor conditions, to consist of an annual international labor conference; an international labor office, to be established at the seat of the League of Nations, as part of its organization. It is to collect and distribute information on labor throughout the world and to make periodical reports.

PART XIV—*Guarantees—Western Europe*—German territory west of the Rhine, together with the bridgeheads, will be occupied by allied troops for fifteen years.

If the conditions are faithfully carried out by Germany certain districts will be evacuated at the end of five years, other districts at the end of ten years, and the remainder, after fifteen years.

Eastern Europe—All German troops at present in territories to the east of the new frontier shall return as soon as the allies deem wise.

PART XV—*Miscellaneous*—Germany agrees to the decisions to be taken as to the territories of Austria-Hungary, Bulgaria, and Turkey, to recognize the new states in the frontiers to be fixed for them, and to recognize the change of status of Upper Savoy and Gex district between France and Switzerland.

Definition of relations between France and Monaco placed on record.

Religious Missions—The allies agree that religious missions in territories belonging or ceded to them shall continue under control of the powers, Germany renouncing all claims in their behalf.

Done at Versailles, the 28th day of June, 1919.

Summary of

Treaty of Peace of Austria

FRONTIERS—The northern frontier follows the existing boundaries separating Bohemia and Moravia from Upper and Lower Austria, subject to rectifications in the regions of Gmund and Feldsberg and along the river Moravia.

The frontier with Italy begins at the Reschen Pass and follows the watershed of the Inn and the Drave rivers on the north and the Adige, Piave, and Tagliamento rivers on the south. This line, which runs through Brenner Pass and the peak of the Signori (Dreiherrenspitze), includes in the Italian frontiers the valley of Sachsen and the basin of Tarvis.

East of the Tarvis region the line follows the Karawanken mountains to a point southeast of Villach, then runs north to the Worthersee, the towns of Klagenfurt and Volkermarkt, thence along the north of the Drave so as to leave to the Serb-Croat-Slovene state Marburg and Radkersburg, north of which latter place it will join the Hungarian frontier.

The disposition of the Klagenfurt basin will be determined by a plebiscite.

If the population votes for union with Austria, the southern frontier of Austria will continue along the Karawanken mountains to a point southeast of Eisenkappel, thence northeast passing east of Bleiburg, traversing the Drave just above its confluence with the Lavant, then rejoin the frontier already traced. The western and northwestern frontiers facing Bavaria, the western frontier facing Switzerland, and the eastern frontier facing Hungary remain unchanged.

EUROPE—The high contracting parties recognize and accept the frontiers of Bulgaria, Greece, Hungary, Poland, Rumania, the Serb-Croat-Slovene state and the Czecho-Slovak state as at present or as ultimately determined.

Austria renounces in favor of the allies all her rights and titles over territories formerly belonging to her.

THE CZECHO-SLOVAK STATE—Austria recognizes the independence of the Czecho-Slovak state, including the autonomous territory south of the Carpathians, in conformity with the action already taken by the allies. The exact boundary between Austria and the new state is to be fixed by a field commission.

THE SERB-CROAT-SLOVENE STATE—Austria similarly recognizes the independence of the Serb-Croat-Slovene state and renounces her rights and titles. A field commission is to fix the exact boundary. The question of the basin of Klagenfurt is reserved.

RUMANIA—Rumania agrees to a similar treaty for protection of minorities and freedom of transit.

RUSSIA—Austria is to recognize the independence of all the territories which formed part of the former Russian empire. She is to accept the annulment of the Brest-Litovsk treaty and of all treaties or agreements concluded since November, 1917, with all governments or political groups in territory of the former Russian empire.

Austria undertakes to bring her institutions into conformity with the principles of liberty and justice, and acknowledges that the obligations for the protection of minorities are matters of international concern over which the league of nations has jurisdiction. She assures complete protection of life and liberty to all.

All Austrian nationals without distinction of race, language or religion are to be equal before the law.

Austria accepts all arrangements which the allies make with Turkey and Bulgaria.

OUTSIDE EUROPE—Austria renounces all rights, titles, and privileges as to her own or her allies' territories to the allies.

The clauses as to Egypt, Morocco, China, and Siam are identical with those of the German treaty except in the case of China.

MILITARY—Within three months the Austrian forces shall be reduced to not to exceed 30,000 including officers and depot troops, universal military service abolished, and voluntary enlistment substituted. The army shall be used exclusively for the maintenance of internal order and control of frontiers. All officers must be regulars, to serve until 40 years old; newly appointed to twenty consecutive years of active service. Enlistments must not be for less than twelve consecutive years, including at least six years with the colors. The armament must be reduced according to detailed schedules and all surplus surrendered. The manufacture of all material shall be confined to one single factory, under the control of the state. Importation and exportation of war materials of all kinds is forbidden.

NAVAL—All Austro-Hungarian warships, submarines, and vessels are declared to be surrendered to the allies. All warships and submarines under construction shall be broken up. All naval arms, ammunition, and other war material shall be surrendered to the allies.

The wireless station at Vienna is not to be used for three months, but only for commercial purposes under supervision.

Air Clauses—Austria may have no military or naval air forces, including dirigibles, must demobilize all existing forces, and must surrender wide categories of aviation material.

Reparation—Austria accepts the responsibility of herself and her allies for causing loss and damage to which the Allies have been subjected as a consequence of the war imposed upon them.

While recognizing that Austria's resources will not be adequate to make complete reparation, the Allies request and Austria will make compensation for damage done to civilians and their property, in accordance with categories of damages similar to Germany.

Damages—The amount of damage is to be determined by the reparations commission, which will notify Austria before May 1, 1921, of the extent of her liabilities and of the schedule of payments for the discharge thereof, during a period of thirty years. It will bear in mind the diminutions of Austria's resources and capacity for payment.

As immediate reparation Austria shall pay during 1919, 1920, and the first four months of 1921, in such a manner as provided by the reparations commission, "a reasonable sum which shall be determined by the commission."

Three Bond Issues—Three bond issues shall be made, the first before May 1, 1921, without interest, the second at 2½ per cent interest, between 1921 and 1926, and thereafter at 5 per cent, with an additional 1 per cent for amortization, beginning in 1926, and a third at 5 per cent.

Shipping—Austria cedes all merchant ships and fishing boats within two months to the reparations commission, and 20 per cent of her river fleet.

Economics—Austria will devote her economic resources to the physical restoration of the invaded areas. Austria agrees to deliver within three months specified amounts of animals to Italy and Rumania; also an option as to timber iron, and magnesite.

She cedes to Italy all cables touching Italy, and to the Allies, the others.

Records, Documents—Austria will restore all records, documents, objects of antiquity and art, and all scientific and bibliographical material taken away from the invaded or ceded territories.

Finances—Austria must pay the total cost of the armies of occupation from the armistice, so long as maintained, and may export no gold before May 1, 1921.

Each of the states to which Austrian territory is transferred shall assume part of the Austrian pre-war debt specifically secured on railways, salt mines, and other property.

Freedom of Transit—The clauses as to freedom of transit are the same in the Austrian as in the German treaty.

Lost Domains—States to which Austrian territory was transferred and states arising from the dismemberment of Austria shall acquire all property within their territories of the old or new Austrian governments. The value is to be assessed by the reparations commission.

No Commercial Advantages—Austria renounces all rights to international, financial or commercial organizations in Germany, Hungary, Bulgaria, Turkey, or the former Russian empire.

She agrees to deliver within one month the gold deposited as security for the Ottoman debt. renounce any benefits accruing from the treaties of Bucharest and Brest-Litovsk, and transfer to the Allies all claims against her former allies.

Summary of the

Treaty of Peace of Poland

"The U. S. of America, the British Empire, France, Italy, and Japan, the Allies on the one hand; and Poland on the other hand;

"Whereas the Allies have by the success of their arms restored to the Polish nation the independence of which it had been unjustly deprived; and

"Whereas on March 30, 1917, Russia assented to the re-establishment of an independent Polish State; and

"Whereas the Polish State, has already been recognized as a sovereign and independent State by the Allies; and

"Whereas under the Treaty of Peace concluded with Germany by the Allies, certain portions of Germany will be incorporated in Poland; and

"Whereas the boundaries of Poland not already laid down are to be subsequently determined by the Allies;

"The U. S. of America, the British Empire, France, Italy, and Japan, on the one hand, confirming their recognition of the Polish State, as a sovereign and independent member of the Family of Nations, and being anxious to ensure the execution of the provisions of Article 93 of the said Treaty of Peace with Germany;

"Poland, on the other hand, desiring to conform her institutions to the principles of liberty and justice, and to give a sure guarantee to the inhabitants of the territory over which she has assumed sovereignty;

"For this purpose the High Contracting Parties represented as follows: The U. S. of America, the British Empire, France, Italy, Japan, and the Polish Republic,

"After having exchanged their full powers, found in good and due form, have agreed as follows:

"ARTICLE 1. Poland undertakes that the stipulations contained in Articles 2 to 8 of this Chapter shall be recognized as fundamental laws.

"ARTICLE 2. Poland assures full and complete protection of life and liberty to all inhabitants without distinction of birth, nationality, language, race, or religion.

"All inhabitants shall be entitled to the free exercise, public or private, of any creed, religion or belief, not inconsistent with public order or public morals.

"ARTICLE 3. Poland declares to be Polish nationals ipso facto German, Austrian, Hungarian or Russian nationals habitually resident in territory which is or may be recognized as forming part of Poland, but subject to any provisions in the Treaties of Peace with Germany or Austria respectively, relating to persons who became resident in such territory after a specified date.

"ARTICLE 4. Poland declares to be Polish nationals ipso facto persons of German, Austrian, Hungarian or Russian nationality who were born in the said territory of parents habitually resident there.

"Nevertheless, within two years these persons may make a declaration in the country in which they are resident, stating that they abandon Polish nationality, and they will then cease to be considered as Polish nationals.

"ARTICLE 5. Poland will put no hindrance in the way of the exercise of the right which the persons concerned have, under the Treaties concluded or to be concluded by the Allies with Germany, Austria, Hungary, or Russia, to choose whether or not they will acquire Polish nationality.

"ARTICLE 6. All persons born in Polish territory who are not born nationals of another State shall ipso facto become Polish nationals.

"ARTICLE 7. All Polish nationals shall be equal before the law and shall enjoy the same civil and political rights without distinction as to race, language or religion.

"Differences of religion, creed, or confession shall not prejudice any Polish national in matters relating to the enjoyment of civil or political rights.

"No restriction shall be imposed on the free use by any Polish national of any language in private intercourse, in commerce, in religion, in the press, or in publications of any kind, or at public meetings.

"Adequate facilities shall be given to Polish nationals, of non Polish speech for the use of their language, either orally or in writing, before the courts.

"ARTICLE 8. Polish nationals who belong to racial, religious, or linguistic minorities, shall enjoy the same treatment and security in law and in fact as the other Polish nationals.

"ARTICLE 9. Poland will provide in the public educational system in towns and districts in which a considerable proportion of Polish nationals of other than Polish speech are residents, adequate facilities for ensuring that in the primary schools the instruction shall be given to the children of such Polish nationals through the medium of their own language. But it shall not prevent the Polish Government from making the teaching of the Polish language obligatory in the said schools.

"The provisions of this Article shall apply to Polish citizens of German speech only in that part of Poland which was German territory on August 1, 1914.

"ARTICLE 10. Educational committees appointed locally by the Jewish communities of Poland will, subject to the general control of the State, provide for the distribution of the proportional share of public funds allocated to Jewish schools, and for the organization and management of these schools.

"ARTICLE 11. Jews shall not be compelled to perform any act which constitutes a violation of their Sabbath, nor shall they be placed under any disability by reason of their refusal to attend courts of law or to perform any legal business on their Sabbath, except for the necessary purposes of military service, national defense or the preservation of public order.

"Poland will refrain from ordering or permitting elections to be held on a Saturday.

"ARTICLE 12. Poland agrees that the stipulations in the foregoing Article so far as they affect persons belonging to racial, religious or linguistic minorities, constitute obligations of international concern and shall be placed under the guarantee of the League of Nations.

"Poland agrees that any member of the Council of the League of Nations shall have the right to bring to the attention of the Council any infraction, and that the Council may take such action as it may deem proper and effective in the circumstances, and any difference of opinion as to questions of law or fact arising out of these articles between the Polish Government and any of the Allies or any Member of the Council of the League of Nations, shall be held to be a dispute of an international character.

"ARTICLE 13. Each of the Allied Powers on the one part and Poland on the other shall be at liberty to appoint diplomatic representatives to reside in their respective capitals, but shall not enter upon their duties until they have been admitted in the usual manner, and shall enjoy all the facilities and immunities of every kind.

"ARTICLE 14. Pending the establishment of an import tariff by the Polish Government, goods originating in the Allied States shall not be subject to any higher duties on importation into Poland than the rates of duty applicable to goods of the same kind under either the German, Austro-Hungarian or Russian Customs Tariffs on July 1, 1914.

"ARTICLE 15. Poland will make no treaty, convention or arrangement which will prevent her from joining in any general agreement for the equitable treatment of the commerce of other States that may be concluded under the League of Nations within five years.

"Poland will extend to the Allies any favors or privileges in customs matters which she may grant during five years to any State with which since August, 1914, the Allies have been at war.

"ARTICLE 16. Pending the agreement referred to above, Poland will treat on the same footing as national vessels the vessels of all the Allies which accord similar treatment to Polish vessels.

"By way of exception from this provision, the right of Poland or of any other Allied State to confine her maritime coasting trade to national vessels is expressly reserved.

"ARTICLE 17. Pending the conclusion under the League of Nations of a Convention to secure and maintain freedom of communications and of transit, Poland accords freedom of transit to or from any Allied State over Polish territory, including territorial waters.

"All charges imposed in Poland on such traffic in transit shall be reasonable. Goods in transit shall be exempt from all customs or other duties. Tariffs for transit traffic across Poland and tariffs between Poland and any Allied Power involving through tickets or waybills shall be established at the request of that Allied Power.

"Freedom of transit will extend to postal, telegraphic, and telephonic services.

"It is agreed that no Allied Power can claim the benefit of these provisions on behalf of any part of its territory in which reciprocal treatment is not accorded.

"If within a period of five years no Convention shall have been concluded under the League of Nations, Poland shall be at liberty at any time thereafter to give twelve months' notice to the Secretary General of the League of Nations to terminate the obligations of this Article.

"ARTICLE 18. Pending the conclusion of a Convention on the International Régime of waterways, Poland will apply to the river system of the Vistula, the régime applicable to International Waterways set out in the Treaty of Peace with Germany.

"ARTICLE 19. Poland will adhere within twelve months to the International Conventions specified in Annex I.

"Poland will adhere to any new convention, concluded with the approval of the Council of the League of Nations within five years to replace any of the International Instruments specified in Annex I.

"The Polish Government will within twelve months notify the Secretary General of the League of Nations whether or not she desires to adhere to either or both of the International Conventions specified in Annex II.

"Until Poland has adhered to the two Conventions, last specified in Annex I, she agrees, on condition of reciprocity, to protect by effective measures the industrial, literary and artistic property of nationals of the Allies.

"Pending her adhesion to the other Conventions specified in Annex I, Poland will secure

to the Allies the advantages to which they would be entitled.

"ANNEX I. TELEGRAPHIC AND RADIO-TELEGRAPHIC CONVENTIONS. International Telegraphic Convention signed at St. Petersburg, July 10-22, 1875.

"Regulations and Tariffs drawn up by the International Telegraph Conference, signed at Lisbon, June 11, 1908.

"International Radio-Telegraphic Convention, July 5, 1912.

"RAILWAY CONVENTIONS. Conventions and arrangements signed at Bern on Oct. 14, 1890, Sept. 20, 1893, July 16, 1895, June 16, 1898, and Sept. 19, 1906, and the current supplementary provisions made under those Conventions.

"Agreement of May 15, 1886, regarding the sealing of railway trucks subject to customs inspection, and Protocol of May 18, 1907.

"Agreement of May 15, 1886, regarding the technical standardization of railways, as modified on May 18, 1907.

"SANITARY CONVENTION. Convention of Dec. 3, 1903.

"OTHER CONVENTIONS. Convention of Sept. 26, 1906; of May 18, 1904; and May 4, 1910; of March 20, 1883, as revised in 1911; of Bern of Sept. 9, 1886, revised at Berlin on Nov. 13, 1908, and completed on March 20, 1914.

"ANNEX II. Agreement of Madrid of April 14, 1891, revised at Washington in 1911, and of April 14, 1891, revised at Washington in 1911.

"ARTICLE 20. All rights and privileges accorded by the foregoing Articles to the Allies shall be accorded equally to all States members of the League of Nations.

"ARTICLE 21. Poland agrees to assume responsibility for such proportion of the Russian public debt and other Russian public liabilities of any kind as may be assigned to her under a special convention between the Allies on the one hand and Poland on the other.

"Done at Versailles, the twenty-eighth day of June, 1919."

Agreement of Allies Regarding Rhine District, and Protocol to Treaty

The Allied and Associated Powers did not insist on making the period of occupation last until the reparation clauses were completely executed, because they assumed that Germany would be obliged to give every proof of her good will and every necessary guarantee before the end of the 15 years' time.

As the cost of occupation involves an equivalent reduction of the amount available for reparations, the Allied and Associated Powers stipulated by Article 431 of the treaty that if before the end of the 15-year period Germany had fulfilled all her obligations under the treaty, the troops of occupation should be immediately withdrawn.

If Germany, at an earlier date, has given proofs of her good will and satisfactory guarantees to assure the fulfillment of her obligations, the Allied and Associated Powers concerned will be ready to come to an agreement between themselves for the earlier termination of the period of occupation.

Now and henceforward in order to alleviate the burden of the reparation bill they agree that as soon as the Allied and Associated Powers concerned are convinced that the conditions of disarmament by Germany are being satisfactorily fulfilled, the annual amount of the sums to be paid by Germany to cover the cost of occupation shall not exceed 240,000,000 marks gold. This provision can be modified if the Allied and Associated Powers agree as to the necessity of such modification.

PROTOCOL TO GERMAN PEACE TREATY

With a view to indicating precisely the conditions in which certain provisions of the treaty of even date are to be carried out it is agreed by the high contracting parties that:

1. A commission will be appointed by the principal Allied and Associated Powers to supervise the destructions of the fortifications of Helgoland, in accordance with the treaty. This commission will be authorized to decide what portion of the works protecting the coast from sea erosion are to be maintained and what portion must be destroyed.

2. Sums reimbursed by Germany to German nationals to indemnify them in respect of the interests which they may be found to possess in the railways and mines referred to in the second paragraph of Article 156 shall be credited to Germany against the sums due by way of reparation.

3. The list of persons to be handed over to the Allied and Associated Governments by Germany under the second paragraph of Article 228 shall be communicated to the German Government within a month from the coming into force of the treaty.

4. The Reparation Commission referred to in Article 240 and paragraphs 2, 3 and 4 of Annex 4 cannot require trade secrets or other confidential information to be divulged.

5. From the signature of the treaty and within the ensuing four months Germany will be entitled to submit for examination by the Allied and Associated Powers documents and proposals in order to expedite the work connected with reparation and thus to shorten the investigation and accelerate the decisions.

6. Proceedings will be taken against persons who have committed punishable offenses in the liquidation of German property, and the Allied and Associated Powers will welcome any information which the German Government can furnish on this subject.

Covenant of the League of Nations

THE HIGH CONTRACTING PARTIES,

In order to promote international co-operation and to achieve international peace and security

by the acceptance of obligations not to resort to war,

by the prescription of open, just and honorable relations between nations,

by the firm establishment of the understandings of international law as the actual rule of conduct among Governments, and

by the maintenance of justice and a scrupulous respect for all treaty obligations in the dealings of organized peoples with one another,

Agree to this Covenant of the League of Nations.

ARTICLE I.

The original Members of the League of Nations shall be those of the Signatories which are named in the Annex to this Covenant and also such of those other States named in the Annex as shall accede without reservation to this Covenant. Such accession shall be effected by a Declaration deposited with the Secretariat within two months of the coming into force of the Covenant. Notice thereof shall be sent to all other Members of the League.

Any fully self-governing State, Dominion or Colony not named in the Annex may become a Member of the League if its admission is agreed to by two-thirds of the Assembly, provided that it shall give effective guarantees of its sincere intention to observe its international obligations, and shall accept such regulations as may be prescribed by the League in regard to its military, naval and air forces and armaments.

Any Member of the League may, after two years' notice of its intention so to do, withdraw from the League, provided that all its international obligations and all its obligations under this Covenant shall have been fulfilled at the time of its withdrawal.

ARTICLE II.

The action of the League under this Covenant shall be effected through the instrumentality of an Assembly and of a Council, with a permanent Secretariat.

ARTICLE III.

The Assembly shall consist of Representatives of the Members of the League.

The Assembly shall meet at stated intervals and from time to time as occasion may require at the Seat of the League or at such other place as may be decided upon.

The Assembly may deal at its meetings with any matter within the sphere of action of the League or affecting the peace of the world.

At meetings of the Assembly each Member of the League shall have one vote, and may have not more than three Representatives.

ARTICLE IV.

The Council shall consist of Representatives of the Principal Allied and Associated Powers, together with Representatives of four other Members of the League. These four Members of the League shall be selected by the Assembly from time to time in its discretion. Until the appointment of the Representatives of the four Members of the League first selected by the Assembly, Representatives of Belgium, Brazil, Spain and Greece shall be members of the Council.

With the approval of the majority of the Assembly, the Council may name additional Members of the League whose Representatives shall always be members of the Council; the Council with like approval may increase the number of Members of the League to be selected by the Assembly for representation on the Council.

The Council shall meet from time to time as occasion may require, and at least once a year, at the Seat of the League, or at such other place as may be decided upon.

The Council may deal at its meetings with any matter within the sphere of action of the League or affecting the peace of the world.

Any Member of the League not represented on the Council shall be invited to send a Representative to sit as a member at any meeting of the Council during the consideration of matters specially affecting the interests of that Member of the League.

At meetings of the Council, each Member of the League represented on the Council shall have one vote, and may have not more than one Representative.

ARTICLE V.

Except where otherwise expressly provided in this Covenant or by the terms of the present Treaty, decisions at any meeting of the Assembly or of the Council shall require the agreement of all the Members of the League represented at the meeting.

All matters of procedure at meetings of the Assembly or of the Council, including the appointment of Committees to investigate particular matters, shall be regulated by the Assembly or by the Council and may be decided by a majority of the Members of the League represented at the meeting.

The first meeting of the Assembly and the

first meeting of the Council shall be summoned by the President of the United States of America.

ARTICLE VI.

The permanent Secretariat shall be established at the Seat of the League. The Secretariat shall comprise a Secretary General and such secretaries and staff as may be required.

The first Secretary General shall be the person named in the Annex; thereafter the Secretary General shall be appointed by the Council with the approval of the majority of the Assembly.

The secretaries and staff of the Secretariat shall be appointed by the Secretary General with the approval of the Council.

The Secretary General shall act in that capacity at all meetings of the Assembly and of the Council.

The expenses of the Secretariat shall be borne by the Members of the League in accordance with the apportionment of the expenses of the International Bureau of the Universal Postal Union.

ARTICLE VII.

The Seat of the League is established at Geneva.

The Council may at any time decide that the Seat of the League shall be established elsewhere.

All positions under or in connection with the League, including the Secretariat, shall be open equally to men and women.

Representatives of the Members of the League and officials of the League when engaged on the business of the League shall enjoy diplomatic privileges and immunities.

The buildings and other property occupied by the League or its officials or by Representatives attending its meetings shall be inviolable.

ARTICLE VIII.

The Members of the League recognize that the maintenance of peace requires the reduction of national armaments to the lowest point consistent with national safety and the enforcement by common action of international obligations.

The Council, taking account of the geographical situation and circumstances of each State, shall formulate plans for such reduction for the consideration and action of the several Governments.

Such plans shall be subjected to reconsideration and revision at least every ten years.

After these plans shall have been adopted by the several Governments, the limits of armaments therein fixed shall not be exceeded without the concurrence of the Council.

The Members of the League agree that the manufacture by private enterprise of munitions and implements of war is open to grave objections. The Council shall advise how the evil effects attendant upon such manufacture can be prevented, due regard being had to the necessities of those Members of the League which are not able to manufacture the munitions and implements of war necessary for their safety.

The Members of the League undertake to interchange full and frank information as to the scale of their armaments, their military, naval and air programmes and the condition of such of their industries as are adaptable to war-like purposes.

ARTICLE IX.

A permanent Commission shall be constituted to advise the Council on the execution of the provisions of Articles I and VIII and on military, naval and air questions generally.

ARTICLE X.

The Members of the League undertake to respect and preserve as against external aggression the territorial integrity and existing political independence of all Members of the League. In case of any such aggression or in case of any threat or danger of such aggression the Council shall advise upon the means by which this obligation shall be fulfilled.

ARTICLE XI.

Any war or threat of war, whether immediately affecting any of the Members of the League or not, is hereby declared a matter of concern to the whole League, and the League shall take any action that may be deemed wise and effectual to safeguard the peace of nations. In case any such emergency should arise the Secretary General shall on the request of any Member of the League forthwith summon a meeting of the Council.

It is also declared to be the friendly right of each Member of the League to bring to the attention of the Assembly or of the Council any circumstance whatever affecting international relations which threatens to disturb international peace or the good understanding between nations upon which peace depends.

ARTICLE XII.

The Members of the League agree that if there should arise between them any dispute likely to lead to a rupture, they will submit the matter either to arbitration or to inquiry by the Council, and they agree in no case to resort to war until three months after the award by the arbitrators or the report by the Council.

In any case under this Article the award of the arbitrators shall be made within a reasonable time, and the report of the Council shall be made within six months after the submission of the dispute.

ARTICLE XIII.

The Members of the League agree that whenever any dispute shall arise between them which they recognize to be suitable for submission to arbitration and which cannot be satisfactorily settled by diplomacy, they will submit the whole subject-matter to arbitration.

Disputes as to the interpretation of a treaty, as to any question of international law, as to the

existence of any fact which if established would constitute a breach of any international obligation, or as to the extent and nature of the reparation to be made for any such breach, are declared to be among those which are generally suitable for submission to arbitration.

For the consideration of any such dispute the court of arbitration to which the case is referred shall be the Court agreed on by the parties to the dispute or stipulated in any convention existing between them.

The Members of the League agree that they will carry out in full good faith any award that may be rendered, and that they will not resort to war against a Member of the League which complies therewith. In the event of any failure to carry out such an award, the Council shall propose what steps should be taken to give effect thereto.

ARTICLE XIV.

The Council shall formulate and submit to the Members of the League for adoption plans for the establishment of a Permanent Court of International Justice. The Court shall be competent to hear and determine any dispute of an international character which the parties thereto submit to it. The Court may also give an advisory opinion upon any dispute or question referred to it by the Council or by the Assembly.

ARTICLE XV.

If there should arise between Members of the League any dispute likely to lead to a rupture, which is not submitted to arbitration in accordance with Article XIII, the Members of the League agree that they will submit the matter to the Council. Any party to the dispute may effect such submission by giving notice of the existence of the dispute to the Secretary General, who will make all necessary arrangements for a full investigation and consideration thereof.

For this purpose the parties to the dispute will communicate to the Secretary General, as promptly as possible, statements of their case with all the relevant facts and papers, and the Council may forthwith direct the publication thereof.

The Council shall endeavor to effect a settlement of the dispute, and if such efforts are successful, a statement shall be made public giving such facts and explanations regarding the dispute and the terms of settlement thereof as the Council may deem appropriate.

If the dispute is not thus settled, the Council either unanimously or by a majority vote shall make and publish a report containing a statement of the facts of the dispute and the recommendations which are deemed just and proper in regard thereto.

Any Member of the League represented on the Council may make public a statement of the facts of the dispute and of its conclusions regarding the same.

If a report by the Council is unanimously agreed to by the members thereof other than the Representatives of one or more of the parties to the dispute, the Members of the League agree that they will not go to war with any party to the dispute which complies with the recommendations of the report.

If the Council fails to reach a report which is unanimously agreed to by the members thereof, other than the Representatives of one or more of the parties to the dispute, the Members of the League reserve to themselves the right to take such action as they shall consider necessary for the maintenance of right and justice.

If the dispute between the parties is claimed by one of them, and is found by the Council to arise out of a matter which by international law is solely within the domestic jurisdiction of that party, the Council shall so report, and shall make no recommendation as to its settlement.

The Council may in any case under this Article refer the dispute to the Assembly. The dispute shall be so referred at the request of either party to the dispute, provided that such request be made within fourteen days after the submission of the dispute to the Council.

In any case referred to the Assembly, all the provisions of this Article and of Article XII relating to the action and powers of the Council shall apply to the action and powers of the Assembly, provided that a report made by the Assembly, if concurred in by the Representatives of those Members of the League represented on the Council and of a majority of the other Members of the League, exclusive in each case of the Representatives of the parties to the dispute, shall have the same force as a report by the Council concurred in by all the members thereof other than the Representatives of one or more of the parties to the dispute.

ARTICLE XVI.

Should any Member of the League resort to war in disregard of its covenants under Articles XII, XIII or XV, it shall ipso facto be deemed to have committed an act of war against all other Members of the League, which hereby undertake immediately to subject it to the severance of all trade or financial relations, the prohibition of all intercourse between their nationals and the nationals of the covenant-breaking State, and the prevention of all financial, commercial or personal intercourse between the nationals of the covenant-breaking State and the nationals of any other State, whether a Member of the League or not.

It shall be the duty of the Council in such case to recommend to the several Governments concerned what effective military, naval or air force the Members of the League shall severally contribute to the armed forces to be used to protect the covenants of the League.

The Members of the League agree, further, that they will mutually support one another in

the financial and economic measures which are taken under this Article, in order to minimize the loss and inconvenience resulting from the above measures, and that they will mutually support one another in resisting any special measures aimed at one of their number by the covenant-breaking State, and that they will take the necessary steps to afford passage through their territory to the forces of any of the Members of the League which are co-operating to protect the covenants of the League.

Any Member of the League which has violated any covenant of the League may be declared to be no longer a Member of the League by a vote of the Council concurred in by the Representatives of all the other Members of the League represented thereon.

ARTICLE XVII.

In the event of a dispute between a Member of the League and a State which is not a Member of the League, or between States not Members of the League, the State or States not Members of the League shall be invited to accept the obligations of membership in the League for the purposes of such dispute, upon such conditions as the Council may deem just. If such invitation is accepted, the provisions of Articles XII to XVI inclusive shall be applied with such modifications as may be deemed necessary by the Council.

Upon such invitation being given the Council shall immediately institute an inquiry into the circumstances of the dispute and recommend such action as may seem best and most effectual in the circumstances.

If a State so invited shall refuse to accept the obligations of membership in the League for the purposes of such dispute, and shall resort to war against a Member of the League, the provisions of Article XVI shall be applicable as against the State taking such action.

If both parties to the dispute when so invited refuse to accept the obligations of membership in the League for the purposes of such dispute, the Council may take such measures and make such recommendations as will prevent hostilities and will result in the settlement of the dispute.

ARTICLE XVIII.

Every treaty or international engagement entered into hereafter by any Member of the League shall be forthwith registered with the Secretariat and shall as soon as possible be published by it. No such treaty or international engagement shall be binding until so registered.

ARTICLE XIX.

The Assembly may from time to time advise the reconsideration by Members of the League of treaties which have become inapplicable and the consideration of international conditions whose continuance might endanger the peace of the world.

ARTICLE XX.

The Members of the League severally agree that this Covenant is accepted as abrogating all obligations or understandings inter se which are inconsistent with the terms thereof, and solemnly undertake that they will not hereafter enter into any engagements inconsistent with the terms thereof.

In case any Member of the League shall, before becoming a Member of the League, have undertaken any obligations inconsistent with the terms of this Covenant, it shall be the duty of such Member to take immediate steps to procure its release from such obligations.

ARTICLE XXI.

Nothing in this Covenant shall be deemed to affect the validity of international engagements, such as treaties of arbitration or regional understandings like the Monroe doctrine, for securing the maintenance of peace.

ARTICLE XXII.

To those colonies and territories which as a consequence of the late war have ceased to be under the sovereignty of the States which formerly governed them and which are inhabited by peoples not yet able to stand by themselves under the strenuous conditions of the modern world, there should be applied the principle that the well-being and development of such peoples form a sacred trust of civilization and that securities for the performance of this trust should be embodied in this Covenant.

The best method of giving practical effect to this principle is that the tutelage of such peoples should be entrusted to advanced nations who by reason of their resources, their experience or their geographical position can best undertake this responsibility, and who are willing to accept it, and that this tutelage should be exercised by them as Mandatories on behalf of the League.

The character of the mandate must differ according to the stage of the development of the people, the geographical situation of the territory, its economic conditions and other similar circumstances.

Certain communities formerly belonging to the Turkish Empire have reached a stage of development where their existence as independent nations can be provisionally recognized subject to the rendering of administrative advice and assistance by a Mandatory until such time as they are able to stand alone. The wishes of these communities must be a principal consideration in the selection of the Mandatory.

Other peoples, especially those of central Africa, are at such a stage that the Mandatory must be responsible for the administration of the territory under conditions which will guarantee freedom of conscience and religion, subject only to the maintenance of public order and morals, the prohibition of abuses such as the slave trade, the arms traffic and the liquor traffic, and the prevention of the establishment

of fortifications or military and naval bases and of military training of the natives for other than police purposes and the defense of territory, and will also secure equal opportunities for the trade and commerce of other Members of the League.

There are territories, such as Southwest Africa and certain of the South Pacific Islands, which, owing to the sparseness of their population, or their small size, or their remoteness from the centers of civilization, or their geographical contiguity to the territory of the Mandatory, and other circumstances, can be best administered under the laws of the Mandatory as integral portions of its territory, subject to the safeguards above mentioned in the interests of the indigenous population.

In every case of mandate, the Mandatory shall render to the Council an annual report in reference to the territory committed to its charge.

The degree of authority, control, or administration to be exercised by the Mandatory shall, if not previously agreed upon by the Members of the League, be explicitly defined in each case by the Council.

A permanent Commission shall be constituted to receive and examine the annual reports of the Mandatories and to advise the Council on all matters relating to the observance of the mandates.

ARTICLE XXIII.

Subject to and in accordance with the provisions of international conventions existing or hereafter to be agreed upon, the Members of the League:

(a) will endeavor to secure and maintain fair and humane conditions of labor for men, women, and children, both in their own countries and in all countries to which their commercial and industrial relations extend, and for that purpose will establish and maintain the necessary international organizations;

(b) undertake to secure just treatment of the native inhabitants of territories under their control;

(c) will entrust the League with the general supervision over the execution of agreements with regard to the traffic in women and children, and the traffic in opium and other dangerous drugs;

(d) will entrust the League with the general supervision of the trade in arms and ammunition with the countries in which the control of this traffic is necessary in the common interest;

(e) will make provision to secure and maintain freedom of communications and of transit and equitable treatment for the commerce of all Members of the League. In this connection, the special necessities of the regions devastated during the war of 1914-1918 shall be borne in mind;

(f) will endeavor to take steps in matters of international concern for the prevention and control of disease.

ARTICLE XXIV.

There shall be placed under the direction of the League all international bureaux already established by general treaties if the parties to such treaties consent. All such international bureaux and all commissions for the regulation of matters of international interest hereafter constituted shall be placed under the direction of the League.

In all matters of international interest which are regulated by general conventions but which are not placed under the control of international bureaux or commissions, the Secretariat of the League shall, subject to the consent of the Council and if desired by the parties, collect and distribute all relevant information and shall render any other assistance which may be necessary or desirable.

The Council may include as part of the expenses of the Secretariat the expenses of any bureau or commission which is placed under the direction of the League.

ARTICLE XXV.

The Members of the League agree to encourage and promote the establishment and co-operation of duly authorized voluntary national Red Cross organizations having as purposes the improvement of health, the prevention of disease and the mitigation of suffering throughout the world.

ARTICLE XXVI.

Amendments to this Covenant will take effect when ratified by the Members of the League whose Representatives compose the Council and by a majority of the Members of the League whose Representatives compose the Assembly.

No such amendment shall bind any Member of the League which signifies its dissent therefrom, but in that case it shall cease to be a Member of the League.

The League of Nations

The League of Nations was organized in 1919 with the principal object of promoting peace among the nations of the world. Geneva, Switzerland, was made the permanent headquarters. The first meeting of the League Council assembled January 16, 1920, and the first League Assembly met November 15 of the same year. Up to and including 1928 nine annual meetings have been held. The presiding officer is elected each year. His title is President of the Assembly. Elected in 1927, Alberto Guani of Chili presided at the meeting in 1928.

The council consists of five permanent members, these being the British Empire, France, Germany, Italy, and Japan. Six non-permanent members make up the remainder of the council, these being Belgium, Brazil, Czecho-Slovakia, Sweden, and Uruguay. A total of 55 countries make up the League of Nations as follows:

NATIONS IN THE LEAGUE.

Abyssinia
Albania
Argentina
Australia
Austria
Belgium
Bolivia
Brazil
British Empire, The
Bulgaria
Canada
Chilè
China
Colombia
Costa Rica
Cuba
Czecho-Slovakia
Denmark
Dominican Republic
Esthonia
Finland
France
Germany
Greece
Guatemala
Haiti
Honduras
Hungary
India
Irish Free State
Italy
Japan
Latvia
Liberia
Lithuania
Luxemburg
The Netherlands
New Zealand
Nicaragua
Norway
Panama
Paraguay
Persia
Peru
Poland
Portugal
Rumania
Salvador
Serb-Croat-Slovene State
Siam
South Africa
Sweden
Switzerland
Uruguay
Venezuela

Among the important countries that do not belong to the League of Nations are Mexico, Russia, Spain, and the United States. It was agreed at the Locarno Conference that Germany would apply for membership, which was done shortly after, but on account of a disagreement in regard to Poland, Brazil, Spain, and several other countries, who demanded to become permanent members of the council, action on the application of Germany was postponed until in September, 1926, when Germany was admitted and Spain resigned. An offer to receive Turkey as a member was extended when the Lausanne Treaty was negotiated, and that country applied for membership, 1926.

HOW ORGANIZED.

The transactions of the League of Nations are through the instrumentality of an assembly and of a council with a permanent secretary. Meetings are held from time to time as occasion may require. While the permanent headquarters are at Geneva, it is permitted to meet at such other places as may be decided upon. It may deal with any matter affecting the peace of the world. Each member of the League has one vote and may be represented by not more than three representatives.

The council consists of representatives of the principal allied and associated powers with representatives of other members of the League. At least one meeting is held each year by the council. The secretary is a permanent official and is assisted by such secretaries and staff as may be required.

MANY QUESTIONS CONSIDERED.

Many questions of interest have been before the League since it was established. The jurisdiction extends not only to the settlement of international disputes, but embraces any matter which will promote the health, morality and happiness of the people. The limitation of armament has been one of the questions of larger interest coming before the League. Other points are those that relate to labor and capital, to the treatment of prisoners of war, to the betterment of economic conditions, the general supervision of mandated territories and application of the provisions of the Treaty of Versailles. Financial aid extended to Austria and Hungary, the protocol intended to avert war, and the establishment of a permanent court of international justice are among the things accomplished. International disputes settled include the following:

1. The Aaland Islands dispute between Finland and Sweden.
2. The dispute between Poland and Lithuania as to the possession of Vilna.
3. The dispute between Poland and Germany as to the division of Upper Silesia.
4. The dispute between Italy, Greece and Jugo-Slavia as to the boundaries of Albania.
5. The boundary dispute between Czecho-Slovakia and Hungary.

GREECE-BULGARIAN TROUBLE

On Oct. 23, 1925, Bulgaria protested to the League of Nations because a Greek army had invaded Bulgarian territory. Greece blamed Bulgaria for the trouble and demanded an indemnity together with an apology and punishment of the guilty parties. After considering the claims of both nations, the League recommended that Greece should pay $219,000 damage and other costs. Greece was also required to pay damages to cover private losses. This action caused a cessation of hostilities.

MOSUL BOUNDARY

A controversy regarding the boundary of Mosul arose between Iraq and Turkey. Great Britain became involved as it holds the mandate of Iraq. The matter was taken up by the League and later by the Permanent Court of International Justice, with the result that arbitration was decided upon by that body. Turkey protested against compulsory arbitration and assumed a war-like mood. The matter was largely a dispute in regard to the rich oil fields surrounding Mosul. It was finally settled in 1927 by paying $2,500,000 in cash to Turkey.

Permanent Court of International Justice

The project drafted by the Advisory Committee of Jurists at The Hague, in the summer of 1920, for a Permanent Court of International Justice was adopted by the Assembly of the League of Nations, modified in some important parts, notably in the matter of obligatory jurisdiction, and completed Dec. 13, 1920. Eleven regular or titular judges, as they are called, and four deputy judges were elected the following year. The election was made by the independent, separate, and concurrent votes of the Council of the League, in which body the great powers form a majority, and the Assembly of the League, in which the small powers have an overwhelming preponderance. At the suggestion of Elihu Root of the Advisory Committee, upon failure of the Council and Assembly to agree, a committee of three was appointed from each body, which produced an agreement.

The Court of International Justice is made up of judges and deputy judges; the last four officials, as reported in 1928, are the deputy judges:

Max Huber, Switzerland, president.
Charles A. Weiss, France, vice-president.
B. J. C. Loder, the Netherlands.
Viscount Robt. Bannatyne Finlay, Great Britain.
Dionisio Anzilotti, Italy.
John Bassett Moore, United States.
Rafael Altamira, Spain.
Epitacio Pessoa, Brazil.
Antonio de Bustamente, Cuba.
Didrik Galtrup Gjedde Nyholm, Denmark.
Yorozo Oda, Japan.
F. V. N. Beichmann, Norway.
Mikhailo Jovanovich, Jugoslavia.
Demitrio Negulesco, Rumania.
Wang Chung-hui, China.

See League of Nations.

On Jan. 27, 1926, the United States Senate voted to join the Permanent Court of International Justice, the vote on adoption being 70 in favor and 17 against. The following reservations and understandings were made a part of the resolution, namely:

1. That such adherence shall not be taken to involve any legal relation on the part of the United States to the League of Nations or the assumption of any obligations by the United States under the Treaty of Versailles.

2. That the United States shall be permitted to participate through representatives designated for the purpose and upon an equality with the other States, members, respectively, of the Council and Assembly of the League of Nations, in any and all proceedings of either the council or the assembly for the election of judges or deputy judges of the Permanent Court of International Justice or for the filling of vacancies.

3. That the United States will pay a fair share of the expenses of the court as determined and appropriated from time to time by the Congress of the United States.

4. That the United States may at any time withdraw its adherence to the said protocol, and that the statute for the Permanent Court of International Justice adjoined to the protocol shall not be amended without the consent of the United States.

5. That the court shall not render any advisory opinion except publicly after due notice to all States adhering to the court and to all interested States and after public hearing or opportunity for hearing given to any State concerned, nor shall it without the consent of the United States entertain any request for an advisory opinion touching any dispute or question in which the United States has or claims an interest.

The signature of the United States to the said protocol shall not be affixed until the powers signatory to such protocol shall have indicated, through an exchange of notes, their acceptance of the foregoing reservations and understandings as a part and a condition of adherence by the United States to the said protocol.

Resolved further, as a part of this act of ratification, That the United States approve the protocol and statute hereinabove mentioned, with the understanding that recourse to the Permanent Court of International Justice for the settlement of differences between the United States and any other State or States can be had only by agreement thereto through general or special treaties concluded between the parties in dispute; and

Resolved further, That adherence to the said protocol and statute hereby approved shall not be so construed as to require the United States to depart from its traditional policy of not intruding upon, interfering with, or entangling itself in the political questions of policy or internal administration of any foreign State, nor shall adherence to the said protocol and statute be construed to imply a relinquishment by the United States of its traditional attitude toward purely American questions.

Practical Home and School Methods

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